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User Manual

ScanAvenger Wireless / Bluetooth / USB 1D&2D Barcode Scanners

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Disclaimer

Please read through the manual carefully before using the product and operate it according to the manual. It is advised to keep this manual for future reference.

Do not disassemble the device or remove the seal label from the device as this will void the warranty.

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Warning sound

If data transmission encounters an issue, the scanner will emit four consecutive alarm sounds. In such cases, please verify the integrity of the connection to ensure proper functionality.

Reading tips

1. To achieve optimal scanning results, aim the scanner's collimator beam at the center of the barcode. The scanner can read barcodes from any direction.
2. Hold the scanner in front of the barcode and press the button to align the collimator beam with the barcode's center.
3. The distance between the scanner and the barcode affects the size of the aiming beam:
    a. Small barcodes: Hold the scanner closer to the barcode.
    b. Large barcodes: Hold the scanner farther away for easier scanning.
4. For highly reflective barcodes (e.g., coated surfaces), adjust the scanner's angle to reduce glare and improve scanning accuracy.

Safety

The scanner's illumination light is intense. Avoid looking directly into the light or aiming it at your eyes to prevent discomfort or potential injury.

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Description of Led & Buzzer State

LED Light	Description
Left blue LED 1	Will flash one time when scanning
Right blue LED 2	Successful Wireless connection
Red LED	Charging
Blue 2 off, blue 1 Flash quickly	2.4G pairing mode
Blue 1 off, Blue 2 Flash quickly	SPP pairing mode
Blue 1 and Blue2 alternately flash	HID pairing mode
Blue 1 and Blue 2 Synchronize flash quickly	BLE pairing mode

Note: The lighting in this section varies slightly according to different product configurations. If you need to know more, you can contact ScanAvenger support.

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Buzzer prompt sound

Buzzer	Description
A long sound	Power ON/OFF
A short sound (low frequency)	Scan common barcode, or paired, wireless connection success
3 short sounds (low frequency)	Wireless transmission failure
5 short sound (low frequency) and stop scanning	Battery out of energy
2 short sounds (low frequency)	Wireless pairing disconnected
2 short sounds (high frequency)	Setup code is not working

Note: The lighting in this section varies slightly according to different product configurations. If you need to know more, you can contact ScanAvenger support.

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Functional configuration instructions and examples

Before configuring prefixes, suffixes, or modifying the Code ID, ensure that the scanner's language setting supports the characters you intend to add. If you're unsure which keyboard layouts support the desired character(s), scan the barcode for the International Keyboard setting.

For a complete list of language settings, refer to the Language Settings Table.

Note: Enabling the International Keyboard may slightly reduce transmission speed.

Configuring Prefixes and Suffixes

There are two methods for adding, modifying, and removing a prefix or a suffix on your scanner:

1. Basic Configuration Barcodes
2. Special Configuration Barcodes

These methods operate independently. If you configure a prefix or suffix using one method, you must use the same method to modify or remove it. Switching between methods is not possible; however, you can have configured prefixes and suffixes with two different methods at the same time.

- Basic Configuration Barcodes allow configuration for specific barcode types and are supported by all software versions.
- Special Configuration Barcodes offer a faster and simpler setup, requiring fewer scans. They also enable more advanced configurations, which are explained here: "Character sets".

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Prefixes and Suffixes with Basic Configuration Barcodes

How to Create a Prefix

Step 1: Identify the HEX Value for the Barcode Type

Consult the Barcode Type ID Table in the Appendix to find the HEX value for your specific barcode type(s).

- If applying a prefix to, for example, QR codes only, use HEX 51.
- If applying a prefix to all barcode types, use HEX 99.

Step 2: Determine the HEX Values for the Prefix Characters

- Identify the characters you wish to use as a prefix (e.g., "X" or "ABC").
- Refer to the ASCII Visible Characters Table in the Appendix for the HEX values of the characters you want to use.
    - Example: "X" = 58, "ABC" = 414243.

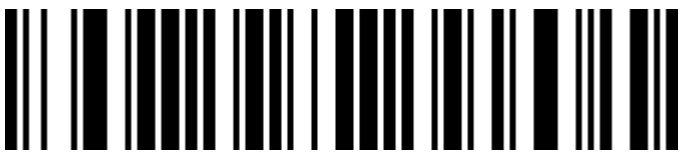
Step 3: Program the Prefix

Scan the configuration barcode "Enable Customized prefix output" to allow the scanner to add a prefix.

Enable Customized prefix output

Scan the configuration barcode "Customized Prefix" to enter the configuration mode.

- The scanner should emit two beeps to confirm entry



Customized prefix

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Sequentially scan the barcodes (from the Data and Edit Barcode Appendix) for:

- The HEX value(s) for the barcode type ID (e.g., 51 for QR codes, 99 for all types).
- The HEX value(s) for each character in your prefix (e.g., X=58 and ABC=414243).

Scan the configuration barcode named "Save" to complete the prefix setup.

Save

Modifying or Cancelling Data During the Process

If you need to make changes during the setup process, you must scan the appropriate barcode before scanning the "Save" barcode. This applies to all the following barcodes except the "Disable customized prefix output".

To delete the last scanned data unit, scan "Cancel Previously Scanned Data Unit". Use this option if you made a mistake while scanning a single character or value and need to remove only the most recent entry without affecting the rest of the sequence.

Cancel Previously Scanned Data Unit

To delete the entire scanned sequence, scan "Cancel Previously Scanned Data Sequence". This is useful when you need to start over from the beginning because multiple incorrect values were entered.

Cancel Previously Scanned Data Sequence

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To abort the process, scan "Cancel Current Setting", which exits the configuration mode without saving any changes.

Cancel current setting

To disable prefixes entirely, scan "Disable Customized Prefix Output" (factory default), restoring the scanner to its original prefix settings.

Disable customized prefix output

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Example — Applying the Prefix "X" to All Barcode Types

Below is an example illustrating how to configure a prefix of "X" for all barcode types. This is just one scenario. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan "Enable Customized prefix output".

Enable Customized prefix output

2. Scan "Customized Prefix". (Scanner will beep twice, indicating configuration mode.)

Customized prefix

3. Scan the barcodes corresponding to "9" and "9" (for all barcode types = 99), and then "5" and "8" (for "X"= 58).

9

9

5

8

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4. Scan "Save" to finalize the configuration.

Save

NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the Barcode type ID Table and the ASCII Visible Characters Table, as well as the Data and Edit Barcode Appendix.

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Example — Applying the Prefix "X" to QR codes

Below is an example illustrating how to configure a prefix of "X" for all barcode types. This is just one scenario. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan "Enable Customized prefix output".

Enable Customized prefix output

2. Scan "Customized Prefix". (Scanner will beep twice, indicating configuration mode.)

Customized prefix

3. Scan the barcodes corresponding to "5" and "1" (for QR code = 51), and then "5" and "8" (for "X"= 58).

5

1

5

8

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4. Scan "Save" to finalize the configuration.

Save

NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the Barcode type ID Table and the ASCII Visible Characters Table, as well as the Data and Edit Barcode Appendix.

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How to remove a customized prefix from all barcodes or a specific type of barcode:

Step 1: Identify the HEX Value for the Barcode Type

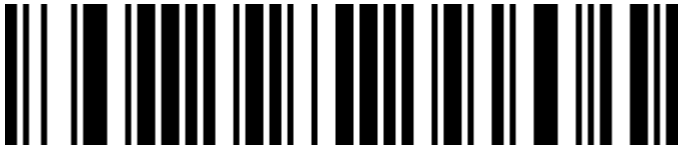
Consult the Barcode Type ID Table in the Appendix to find either the HEX value for your specific barcode type(s) or for all barcodes.

Step 2: Remove the Prefix

Scan "Enable Customized Prefix output".

Enable Customized prefix output

Scan "Customized Prefix". (Scanner will beep twice, indicating configuration mode.)



Customized prefix

Sequentially scan the barcodes (from the Data and Edit Barcode Appendix) for the HEX value for the barcode type ID (e.g., 51 for QR codes, 99 for all types).

Scan "Save" to finalize the configuration.

Save

Note:

- If a prefix has been set for all barcodes, removing a specific barcode type's prefix will restore the prefix set for all barcodes.
- To clear prefixes for all barcode types, scan the configuration barcodes labeled "Clear All Customized Prefixes."

Clear all customized prefix

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Example — Remove a Prefix from QR codes

Below is an example illustrating how to remove a prefix from QR codes, and consequently from all barcode types. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan "Enable Customized Prefix output".

Enable Customized prefix output

2. Scan "Customized Prefix". (Scanner will beep twice, indicating configuration mode.)

Customized prefix

3. Scan the barcodes corresponding to "5" and "1" (for QR code = 51).

5

1

4. Scan "Save" to finalize the configuration.

Save

NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the Barcode type ID Table and the ASCII Visible Characters Table, as well as the Data and Edit Barcode Appendix.

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How to Create a Suffix

Step 1: Identify the HEX Value for the Barcode Type

Consult the Barcode Type ID Table in the Appendix to find the HEX value for your specific barcode type(s).

- If applying a prefix to, for example, QR codes only, use HEX 51.
- If applying a prefix to all barcode types, use HEX 99.

Step 2: Determine the HEX Values for the Suffix Characters

- Identify the characters you wish to use as a prefix (e.g., "X" or "ABC").
- Refer to the ASCII Visible Characters Table in the Appendix for the HEX values of the characters you want to use.
    - Example: "X" = 58, "ABC" = 414243.

Step 3: Program the Suffix

Scan the configuration barcode named "Enable Customized Suffix output" to allow the scanner to add a Suffix.

Enable customized suffix output

Scan the configuration barcode "Customized Suffix" to enter the configuration mode.

- The scanner should emit two beeps to confirm entry

Customized Suffix

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Sequentially scan the barcodes (from the Data and Edit Barcode Appendix) for:

- The HEX value(s) for the barcode type ID (e.g., 51 for QR codes, 99 for all types).
- The HEX value(s) for each character in your prefix (e.g., X=58 and ABC=414243).

Scan "Save" to finalize the configuration.

Save

Modifying or Cancelling Data During the Process

If you need to make changes during the setup process, you must scan the appropriate barcode before scanning the "Save" barcode. This applies to all the following barcodes except the "Disable Customized Suffix Output".

To delete the last scanned data unit, scan "Cancel Previously Scanned Data Unit". Use this option if you made a mistake while scanning a single character or value and need to remove only the most recent entry without affecting the rest of the sequence.

Cancel Previously Scanned Data Unit

To delete the entire scanned sequence, scan "Cancel Previously Scanned Data Sequence". This is useful when you need to start over from the beginning because multiple incorrect values were entered.

Cancel Previously Scanned Data Sequence

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To abort the process, scan "Cancel Current Setting", which exits the configuration mode without saving any changes.

Cancel current setting

To disable suffixes entirely, scan "Disable Customized Suffix Output" (factory default), restoring the scanner to its original suffix settings.

Disable customized suffix output (default)

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Example — Applying the Suffix "X" to All Barcode Types

Below is an example illustrating how to configure a suffix of "X" for all barcode types. This is just one scenario. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan "Enable Customized suffix output".

Enable customized suffix output

2. Scan "Customized Suffix". (Scanner will beep twice, indicating configuration mode.)

Customized suffix

3. Scan the barcodes corresponding to "9" and "9" (for all barcode types = 99), and then "5" and "8" (for "X"= 58).

9

9

5

8

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4. Scan "Save" to finalize the configuration.

Save

NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the Barcode type ID Table and the ASCII Visible Characters Table, as well as the Data and Edit Barcode Appendix.

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Example — Applying the Suffix "X" to QR codes

Below is an example illustrating how to configure a prefix of "X" for all barcode types.

This is just one scenario. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan "Enable Customized suffix output".

Enable customized suffix output

2. Scan "Customized Suffix". (Scanner will beep twice, indicating configuration mode.)

Customized Suffix

3. Scan the barcodes corresponding to "5" and "1" (for QR code = 51), and then "5" and "8" (for "X"= 58).

5

1

5

8

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4. Scan "Save" to finalize the configuration.

Save

NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the Barcode type ID Table and the ASCII Visible Characters Table, as well as the Data and Edit Barcode Appendix.

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How to remove a customized suffix from all barcodes or a specific type of barcode:

Step 1: Identify the HEX Value for the Barcode Type

Consult the Barcode Type ID Table in the Appendix to find either the HEX value for your specific barcode type(s) or for all barcodes.

Step 2: Remove the Suffix

Scan "Enable Customized suffix output".

Enable customized suffix output

Scan "Customized Suffix". (Scanner will beep twice, indicating configuration mode.)

Customized Suffix

Sequentially scan the barcodes (from the Data and Edit Barcode Appendix) for the HEX value for the barcode type ID (e.g., 51 for QR codes, 99 for all types).

Scan "Save" to finalize the configuration.

Save

Note:

- If a prefix has been set for all barcodes, removing a specific barcode type's prefix will restore the prefix set for all barcodes.
- To clear Suffixes for all barcode types, scan the configuration barcodes labeled "Clear All Customized Suffix.

Clear all the suffix

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Example — Remove a Suffix from QR codes

Below is an example illustrating how to remove a suffix from QR codes, and consequently from all barcode types. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan "Enable Customized suffix output".

Enable customized suffix output

2. Scan "Customized Suffix". (Scanner will beep twice, indicating configuration mode.)

Customized Suffix

3. Scan the barcodes corresponding to "5," "1" (for 51).

5

1

4. Scan "Save" to finalize the configuration.

Save

NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the Barcode type ID Table and the ASCII Visible Characters Table, as well as the Data and Edit Barcode Appendix.

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Prefixes and Suffixes with Special Configuration Barcodes

How to add a Prefix

Step 1: Determine the HEX Values for the Prefix Characters

- Identify the characters you wish to use as a prefix (e.g., "X" or "ABC").
- Refer to the ASCII Visible Characters Table in the Appendix for the HEX values of the characters you want to use.
    - Example: "X" = 58, "ABC" = 414243.

Step 2: Program the Prefix

Scan the configuration barcode "Enter Setup Mode" to enter the configuration mode.

Enter Setup Mode

Scan the configuration barcode "Set Prefix" to allow the scanner to add a prefix.

Set Prefix

Sequentially scan the barcode(s), from the Characters' Barcodes Appendix, corresponding to the HEX value(s) of the desired character(s):

- For example, scan the barcode with HEX value 58 and for ABC scan the barcodes with HEX values 41, 42, 43.

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Scan the "Exit Settings Mode" barcode to save and apply the settings.

Exit Setup Mode

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Example — Applying the Prefix "X"

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

Below is an example illustrating how to configure a prefix of "X" for all barcode types. This is just one scenario. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan the configuration barcode "Enter Setup Mode" to enter the configuration mode.

Enter Setup Mode

2. Scan the configuration barcode "Set Prefix"

Set Prefix

3. Scan the barcode corresponding to the HEX value of X, which is 58.

58

4. Scan the "Exit Settings Mode" barcode to save and apply the settings.

Exit Setup Mode

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NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the ASCII Visible Characters Table and the Characters' Barcodes Appendix.

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Remove a Prefix

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

To remove a previously configured prefix, follow these steps:

1. Start the scanner and scan the "Enter Setup Mode" barcode

Enter Setup Mode

2. Scan the "Set Prefix" barcode.

Set Prefix

3. Scan the "Exit Setup Mode" barcode to save and apply the changes.

Exit Setup Mode

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How to add a Suffix

Step 1: Determine the HEX Values for the Suffix Characters

- Identify the characters you wish to use as a prefix (e.g., "X" or "ABC").
- Refer to the ASCII Visible Characters Table in the Appendix for the HEX values of the characters you want to use.
    - Example: "X" = 58, "ABC" = 414243.

Step 2: Program the Suffix

Scan the configuration barcode "Enter Setup Mode" to enter the configuration mode.

Enter Setup Mode

Scan the configuration barcode "Set Suffix " to allow the scanner to add a prefix.

Set Suffix

Sequentially scan the barcode(s), from the Characters' Barcodes Appendix, corresponding to the HEX value(s) of the desired character(s):

- For adding X, scan the barcode with HEX value 58, and for ABC scan the barcodes with HEX values 41, 42, 43.

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Scan the "Exit Settings Mode" barcode to save and apply the settings.

Exit Setup Mode

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Example — Applying the Suffix "X"

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

Below is an example illustrating how to configure a suffix of "X" for all barcode types. This is just one scenario. You can find the entire list of barcodes in the Appendix.

Program Sequence:

1. Scan the configuration barcode "Enter Setup Mode" to enter the configuration mode.

Enter Setup Mode

2. Scan the configuration barcode "Set Suffix"

Set Suffix

3. Scan the barcode corresponding to the HEX value of X, which is 58.

58

4. Scan the "Exit Settings Mode" barcode to save and apply the settings.

Exit Setup Mode

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NOTE: This overview and example are meant to demonstrate the general process. For a full list of barcodes and values please see the ASCII Visible Characters Table and the Characters' Barcodes Appendix.

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Remove a Suffix

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

To remove a previously configured suffix, follow these steps:

Start the scanner and scan the "Enter Setup Mode" barcode

Enter Setup Mode

Scan the "Set Suffix" barcode.

Set Suffix

Scan the "Exit Settings Mode" barcode to save and apply the settings.

Exit Setup Mode

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CODE ID

The CODE ID feature allows you to display an identifier for each scanned barcode. You can choose to:

1. Show the CODE ID before or after the barcode.
2. Customize the CODE ID for specific barcode types.
3. Disable the CODE ID entirely.

Enabling or Disabling CODE ID Display

To enable or disable the CODE ID display, scan the appropriate configuration barcode:

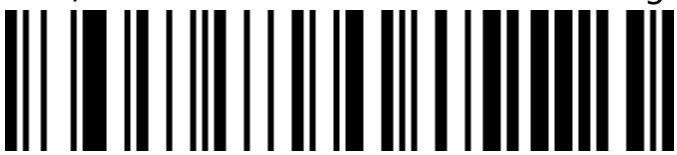
Scan "Enable CODE ID as prefix" to show the CODE ID before the scanned barcode.

Enable CODE ID as prefix

Scan "Enable CODE ID as suffix" to show the CODE ID after the scanned barcode.

Enable CODE ID as suffix

Scan "Disable CODE ID Output" (factory default) to disable the CODE ID from showing.



Disable CODE ID output

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Customizing the CODE ID

If you want to customize the CODE ID for a specific barcode type, follow these steps:

Step 1: Identify the HEX Value for the Barcode Type

Consult the Barcode Type ID Table in the Appendix to find the HEX value for your specific barcode type(s).

- Example: QR Codes = 51, EAN-13 = 64.

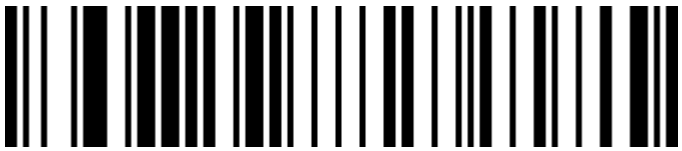
Step 2: Determine the HEX Values

- Identify the characters you wish to use (e.g., "X" or "ABC").
- Refer to the ASCII Visible Characters Table in the Appendix for the HEX values of the characters you want to use.
    - Example: "X" = 58, "ABC" = 414243.

Step 3: Program the CODE ID

Scan the configuration barcode "Customized Prefix" to enter the configuration mode.

- The scanner should emit two beeps to confirm entry



Customized CODE ID

Sequentially scan the barcodes (from the Data and Edit Barcode Appendix) for:

- The HEX value(s) for the barcode type ID (e.g., 51 for QR codes, 64 for EAN-13).
- The HEX value(s) for each character in your prefix (e.g., X=58 and ABC=414243).

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Scan "Save" to finalize the configuration.

Save

Modifying or Cancelling Data During the Process

If you need to make changes during the setup process, you must scan the appropriate barcode before scanning the "Save" barcode. This applies to all the following barcodes except the "Clear All Customized CODE ID" barcode, which can be scanned at any time to remove all custom CODE IDs.

To delete the last scanned data unit, scan "Cancel Previously Scanned Data Unit". Use this option if you made a mistake while scanning a single character or value and need to remove only the most recent entry without affecting the rest of the sequence.

Cancel Previously Scanned Data Unit

To delete the entire scanned sequence, scan "Cancel Previously Scanned Data Sequence". This is useful when you need to start over from the beginning because multiple incorrect values were entered.

Cancel Previously Scanned Data Sequence

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To abort the process, scan "Cancel Current Setting", which exits the configuration mode without saving any changes.

Cancel current setting

To clear all customised CODE IDs, scan "Clear all customized CODE ID"

Clear all customized CODE ID

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Example — Changing the CODE ID of QR Codes to "X"

Below is an example of how to customize the CODE ID for QR codes to "X". This is just one scenario and is meant to demonstrate the general process. For a full list of barcodes and values please see the Barcode type ID Table and the ASCII Visible Characters Table, as well as the Data and Edit Barcode Appendix

Program Sequence:

Scan "Customized CODE ID". (Scanner will beep twice, indicating configuration mode.)

Customized CODE ID

Scan the barcodes corresponding to "5" and "1" (for QR codes= 51), and then "5" and "8" (for "X"= 58).

5

1

5

8

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Scan "Save" to finalize the configuration.

Save

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Barcode Length Settings

When setting barcode length limits, ensure the following:

- The minimum barcode length must not exceed the currently configured maximum length; otherwise, an error will occur.
- The maximum barcode length must not be less than the currently configured minimum length.

How to Set Barcode Length Limits

Follow these steps to set the minimum and maximum barcode length for your scanner:

1. Set the Minimum Length (smallest barcode length allowed)
    a. Scan the "Minimum Length" configuration barcode for the specific barcode type you want to modify.
    b. Scan a barcode from the Data and Edit Barcode Appendix to choose the minimum number of characters:
        i. Example: Scan 4 if you want the scanner to read barcodes that are at least 4 characters long.
        ii. Example: Scan 5 and 0 if you want to allow barcodes of any length.
    c. Scan "Save" to finalize the configuration.

2. Set the Maximum Length (largest barcode length allowed)
    a. Scan the "Maximum Length" configuration barcode for the specific barcode type you want to modify.
    b. Scan a barcode from the Data and Edit Barcode Appendix to choose the maximum number of characters:
        i. Example: Scan 1 and 2 if you want the scanner to read barcodes up to 12 characters long.
        ii. Example: Scan 5 and 0 if you want to allow barcodes of any length.
3. Scan "Save" to finalize the configuration.

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This is just one scenario and is meant to demonstrate the general process. For a full list of barcodes and values please see the Data and Edit Barcode Appendix

Example: Configuring Code 128 to Read Barcodes Between 4 and 12 Characters

If you want your scanner to read only Code 128 barcodes that are between 4 and 12 characters long, follow these steps:

1. Set Minimum Length
    a. Scan the "Code 128 Minimum Length" configuration barcode.
    b. Scan a barcode from the Data and Edit Barcode Appendix to choose the minimum number of characters:
        i. Example: Scan 4 to set the minimum barcode length to 4 characters.
        ii. Example: Scan 5 and 0 if you want to allow barcodes of any length.
2. Scan "Save" to finalize the configuration.

1. Set Maximum Length
    a. Scan the "Code 128 Maximum Length" configuration barcode.
    b. Scan a barcode from the Data and Edit Barcode Appendix to choose the maximum number of characters:
        i. Example: Scan 1 and 2 to set the maximum barcode length to 12 characters.
        ii. Example: Scan 5 and 0 if you want to allow barcodes of any length.
2. Scan "Save" to finalize the configuration.

This is just one scenario and is meant to demonstrate the general process. For a full list of barcodes and values please see the Data and Edit Barcode Appendix

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Specific length configurations Interleaved 2 of 5 barcodes

The Interleaved 2 of 5 barcode types features additional editing options. You can choose to:

1. Direct configuration through default configuration barcodes.
2. Custom configuration by manually editing the length depending on your needs.

Direct Configuration Option

Scan the barcode according to your needs to set the length directly.

ITF25 adaptive length (6-50 bits) (default)

ITF25 6 bits length

ITF25 8 bits length

ITF25 10 bits length

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ITF25 12 bits length

ITF25 14 bits length

ITF25 16 bits length

ITF25 18 bits length

ITF25 20 bits length

ITF25 22 bits length

ITF25 24 bits length

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Custom Configuration Option

If you want to customize the Interleaved 2 of 5 barcode type to a specific length, follow these steps:

Set Minimum Length:

1. Scan the "Interleaved 2 of 5 minimum length" configuration barcode.

Interleaved 2 of 5 minimum length (0~50 bits)

2. Scan a barcode from the Data and Edit Barcode Appendix to choose the minimum number of characters:
    a. Example: Scan 6 to set the minimum barcode length to 6 characters.
    b. Example: Scan 0 if you want to allow barcodes of any length.

3. Scan "Save" to finalize the configuration.

Save

This is just one scenario and is meant to demonstrate the general process. For a full list of barcodes and values please see the Data and Edit Barcode Appendix.

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Set Maximum Length

1. Scan the "Interleaved 2 of 5 maximum length" configuration barcode.

Interleaved 2 of 5 maximum length (0~50 bits)

2. Scan a barcode from the Data and Edit Barcode Appendix to choose the maximum number of characters:
    a. Example: Scan 1 and 2 to set the maximum barcode length to 12 characters.
    b. Example: Scan 5 and 0 if you want to allow barcodes of any length.

3. Scan "Save" to finalize the configuration.

Save

This is just one scenario and is meant to demonstrate the general process. For a full list of barcodes and values please see the Data and Edit Barcode Appendix

Modifying or Cancelling Data During the Process

If you need to make changes during the setup process, you must scan the appropriate barcode before scanning the "Save" barcode.

To delete the last scanned data unit, scan "Cancel Previously Scanned Data Unit". Use this option if you made a mistake while scanning a single character or value and need to remove only the most recent entry without affecting the rest of the sequence.

Cancel Previously Scanned Data Unit

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To delete the entire scanned sequence, scan "Cancel Previously Scanned Data Sequence". This is useful when you need to start over from the beginning because multiple incorrect values were entered.

Cancel Previously Scanned Data Sequence

To abort the process, scan "Cancel Current Setting", which exits the configuration mode without saving any changes.

Cancel current setting

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Barcode Section Edit

The Data Edit function allows you to customize the barcode content by dividing it into three fields: First, Mid, and End. You can configure the length and transmission settings for the Start and End fields based on your specific needs.

Note: Non-barcode content such as customized suffixes, start characters, end characters, CODE ID, and AIM ID are not affected by the data editing function.

Transmit complete characters (default)

Only transmit First part

Only transmit Mid part

Only transmit End part

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Character length configuration

Use the following barcodes to set the length of the First or End segment. The length is defined in bytes and must be entered using decimal values.

Set First part length

Set End part length

Example: Setting the Start Segment Length to 10 Bytes (10 digits)

1. Scan the "Set First part length" barcode.

Set First part length

2. Scan the barcodes corresponding to the numbers 1 and 0 (also found in the appendix).

1

0

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3. Scan "Save" to finalize the configuration.

Save

Example: Setting the End Segment Length to 8 Bytes (8 digits)

1. Scan the "Set End part length" barcode.

Set End part length

2. Scan the barcodes corresponding to the numbers 8.

8

3. Scan "Save" to finalize the configuration.

Save

These are just two scenarios and are meant to demonstrate the general process. For a full list of barcodes and values please see the Data and Edit Barcode Appendix

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Modifying or Cancelling Data During the Process

If you need to make changes during the setup process, you must scan the appropriate barcode before scanning the "Save" barcode.

To delete the last scanned data unit, scan "Cancel Previously Scanned Data Unit". Use this option if you made a mistake while scanning a single character or value and need to remove only the most recent entry without affecting the rest of the sequence.

Cancel Previously Scanned Data Unit

To delete the entire scanned sequence, scan "Cancel Previously Scanned Data Sequence". This is useful when you need to start over from the beginning because multiple incorrect values were entered.

Cancel Previously Scanned Data Sequence

To abort the process, scan "Cancel Current Setting", which exits the configuration mode without saving any changes.

Cancel current setting

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Part I: Basic Configuration Barcodes

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Interface

The scanning device supports USB keyboard, USB serial port (USB-COM), and serial port interface mode.

Scan the barcode below can be configured as USB keyboard.

USB keyboard (Factory default)

Scan the barcode below to configure the scanner to serial mode.

Serial mode

Scan the barcode below to configure the scanner to USB serial mode.

(Requires driver installation)

USB serial (USB-COM)

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Output encoding format

In order to output correctly according to the specified encoding format, you need to specify the output encoding format, such as Simplified Chinese in Notepad / excel output configuration into GBK encoding, in Word and other output configured into UNICODE encoding.

When the output encoding format is configured as English/Latin-1 encoding, the output mode of the USB keyboard is affected by the virtual keyboard function switch. When the output encoding format is configured as GBK encoding / UNICODE encoding, the output mode of the USB keyboard is forced to be the virtual keyboard output.

English/Latin-1 encoding (default)

GBK encoding (Notepad/excel)

UNICODE encoding (Word)

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Serial configuration

Baud rating

Baud 4800

Baud 9600（default)

Baud 19200

Baud 38400

Baud 57600

Baud 115200

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Serial data bit, stop bit, parity/check digit configuration

7-bit data, 1 bit stop, no parity/check digit

7-bit data, 1 bit stop, even parity/check digit

7-bit data, 1 bit stop, odd parity/check digit

7-bit data, 2-bit stop, no parity/check digit

7-bit data, 2-bit stop, even parity/check digit

7-bit data, 2-bit stop, odd parity/check digit

8-bit data, 1 bit stop, no parity/check digit (default)

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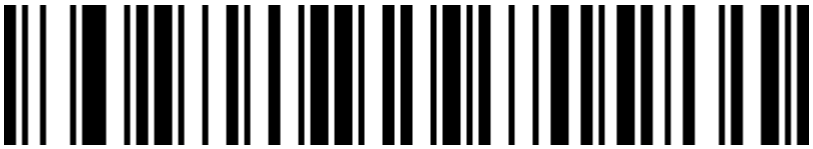
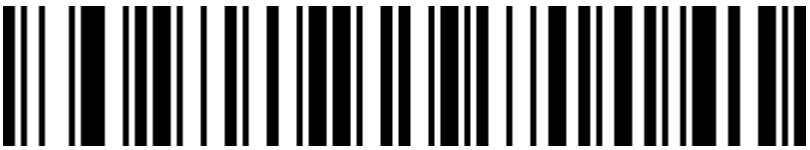
8-bit data, 1 bit stop, even parity/check digit

8-bit data, 1 bit stop, odd parity/check digit

8-bit data, 2-bit stop, no parity/check digit



8-bit data, 2-bit stop, even parity/check digit



8-bit data, 2-bit stop, odd parity/check digit

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GS Control character replacement

No replace (default)

Replace to |

Replace to ^]

Replace to]

Replace to <GS>

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Scan mode

This scanner is equipped with Auto Sense Mode, which allows for automatic barcode detection without manually triggering the scanner. Use the barcodes below to configure the desired scan mode.

Disable auto sense mode

When Auto Sense Mode is disabled, the scanner requires you to press the button to initiate a scan. This is the factory default setting.

Disable auto sense (default)

Enable auto sense mode

When Auto Sense Mode is enabled, the scanner automatically detects, and scans barcodes placed in front of the lens without requiring manual activation.

Enable auto sense

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Same barcode decoding time

This setting configures the interval time for decoding the same barcode, when the scanner is in Auto Sense mode. If the configured interval time is not exceeded, the scanner will scan the same barcode only once. Use the barcodes below to configure the detection interval according to your needs.

Same barcode detection interval 500ms

Same barcode detection interval 750ms (default)

Same barcode detection interval 1s

Same barcode detection interval 2s

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Center mode

When Center Mode is enabled, the scanner will only recognize barcodes located at the center of the scanner's sensor field of view. This can improve accuracy when scanning in environments with multiple barcodes. By default, this mode is disabled.

Disable center mode (default)

Enable center mode

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AIM ID

Here are the barcodes to enable the scanner to show the AIM ID, and you can find the list of all the possible AIM ID values in this AIM ID Table.

Disable barcode AIM (Default)

Enable AIM ID before barcode

Enable AIM ID before barcode

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Inversed barcode option

(Mainly for 1D barcodes/Data Matrix/Aztec)

Only normal barcode

Only inverse barcode

Both normal and inverse barcode

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Barcode type

Enable / Disable all the barcodes

Enabling all barcode types may result in slower decoding speeds. It is recommended to enable only the barcode types required for your specific application. By default, all barcode types are enabled.

Enable all the barcode types

Disable all the barcode types

Enable / Disable all the 1D barcodes

Enable all the 1D barcode type

Disable all the 1D barcode type

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Enable / Disable all the 2D barcodes

Enable all the 2D barcode type

Disable all the 2D barcode type

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Codabar

Enable/Disable barcode

Enable Codabar

Disable Codabar

Codabar Start / End character

Don’t send Codabar start/end character (default)

Send Codabar start/end character

Codabar length limited setting

Codabar minimum length (0~50 bits)

Codabar maximum length (0~50 bits)

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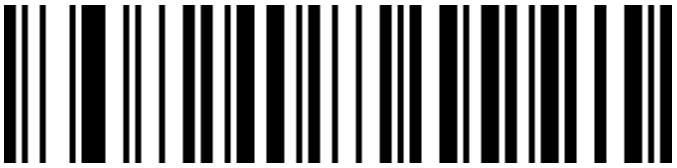
Code 39

Enable/Disable barcode

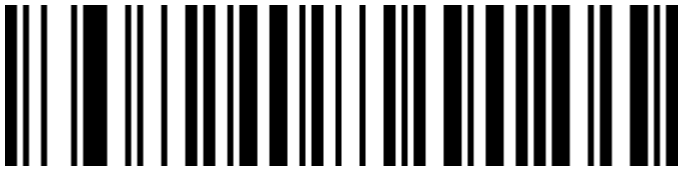
Enable Code 39

Disable Code 39

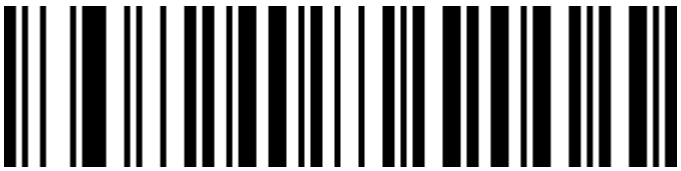
Code 39 parity



Disable Code 39 parity (default)



Enable Code 39 parity but don’t send parity/check digit



Enable Code 39 parity and send parity/check digit

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Code 39 Full ASCII

Enable Full ASCII

Disable Full ASCII (Factory default)

Code 39 length limited setting

Code 39 minimum length (0~50 bits)

Code 39 maximum length (0~50 bits)

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Code 32 (Need enable code39)

Enable / Disable barcode

Enable Code 32

Disable Code 32

Interleaved 2 of 5 (ITF25)

Enable / Disable barcode

Enable ITF25

Disable ITF25

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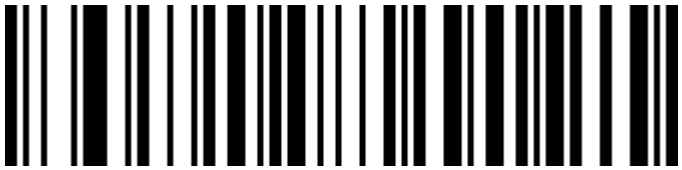
Interleaved 2 of 5 (ITF25) parity



Enable ITF25 parity but don’t send parity/check digit

Enable ITF25 parity and send parity/check digit

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Industrial 2 of 5

Enable/Disable barcode

Enable Industrial 2 of 5

Disable Industrial 2 of 5

Industrial 2 of 5 length limited setting

Industrial 2 of 5 minimum length (0~50 bits)

Industrial 2 of 5 maximum length (0~50 bits)

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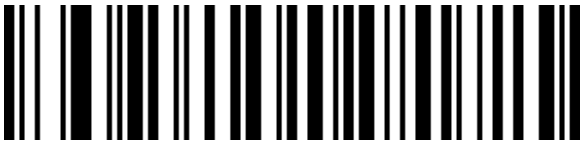
Matrix 2 of 5 (4-24 bits)

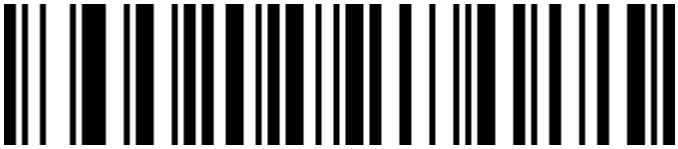
Enable / Disable barcode



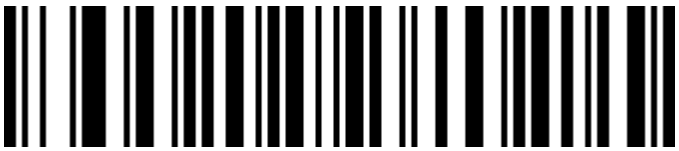
Enable Matrix 2 of 5

Disable Matrix 2 of 5

Matrix 2 of 5 length limited setting



Matrix 2 of 5 minimum length (0~50 bits)



Matrix 2 of 5 maximum length (0~50 bits)

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Code 93

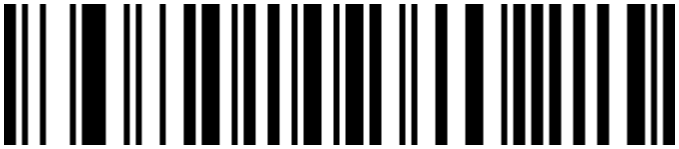
Enable/Disable barcode

Enable Code 93

Disable Code 93

Code 93 length limited setting

Code 93 minimum length (0~50 bits)



Code 93 maximum length (0~50 bits)

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Code 11

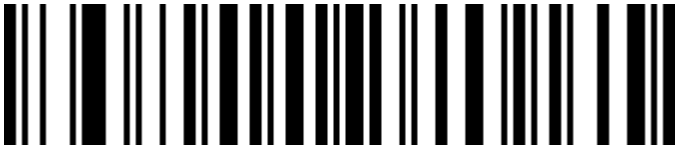
Enable / Disable barcode

Enable Code 11

Disable Code 11 (default)

Code 11 length limited setting

Code 11 minimum length (0~50 bits)



Code 11 maximum length (0~50 bits)

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Code 128

Enable Code 128

Disable Code 128

ISBT-128

Disable ISBT 128

Enable ISBT 128

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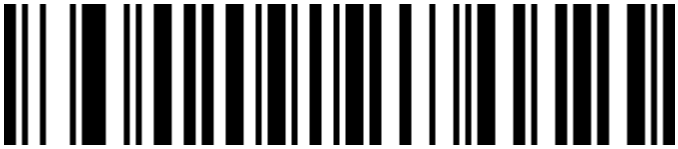
GS1-128

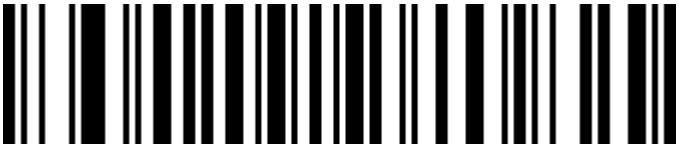
Enable GS1-128

Disable GS1-128

128 code length limited setting



128 code minimum length (0~50 bits)



128 code maximum length (0~50 bits)

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UPC-A

Enable / Disable barcode

Enable UPC-A

Disable UPC-A

UPC-A parity

Send UPC-A parity/check digit (default)

Don’t send UPC-A parity/check digit

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UPC-A transfer EAN-13

Enable UPC-A transfer EAN-13

Disable UPC-A transfer EAN-13 (default)

UPC-E

Enable/Disable barcode

Enable UPC-E

Disable UPC-E

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UPC-E parity

Send UPC-E parity/check digit (default)

Don’ t send UPC-E parity/check digit

UPC-E expand UPC-A

UPC-E expand UPC-A

Disable UPC-E expand UPC-A (default)

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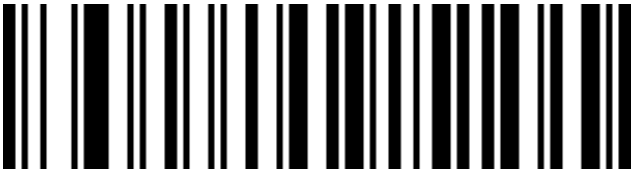
EAN/JAN-8

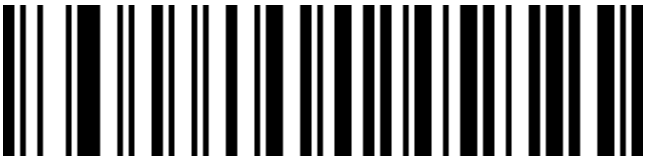
Enable EAN/JAN-8



Disable EAN/JAN-8

EAN/JAN-13

Enable EAN/JAN-13



Disable EAN/JAN-13

UPC/EAN/JAN Additional code

Ignore UPC/EAN/JAN additional code (default)

Decode UPC/EAN/JAN additional code

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Adaptive UPC/EAN/JAN additional code

EAN13 transfer ISBN

Enable EAN13 transfer ISBN

Disable EAN13 transfer ISBN code (default)

EAN13 transfer ISSN

Enable EAN13 transfer ISSN code

Disable EAN13 transfer ISSN code (default)

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GS1 DataBar (RSS14)

Enable GS1 DataBar

Disable GS1 DataBar

GS1 DataBar Limited

Enable GS1 DataBar Limited

Disable GS1 DataBar Limited

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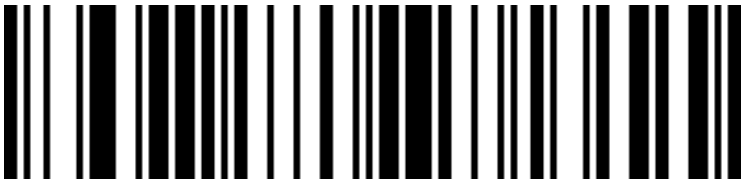
GS1 DataBar Expanded

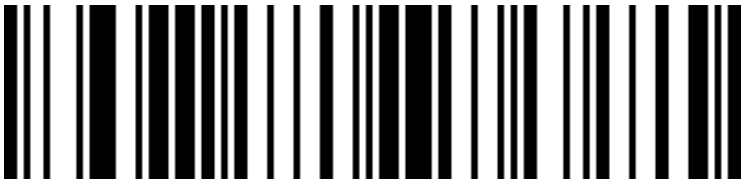
Enable GS1 DataBar Expanded

Disable GS1 DataBar Expanded

PDF417



Enable PDF417



Disable PDF417

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Micro PDF417

Enable Micro PDF417

Disable Micro PDF417

QR Code

Enable QR

Disable QR

Micro QR

Micro QR

Disable Micro QR

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Data Matrix

Enable Data Matrix

Disable Data Matrix

Aztec Code

Disable Aztec

Enable Aztec

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Part II: Special Configuration Codes

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Use instructions

All scanner functions are configured by scanning specific setting barcodes. Follow these steps to configure a function:

1. Enter Setup Mode: Scan the "Enter Setup Mode" barcode to begin.
2. Set Function: Scan the barcode corresponding to the desired function.
3. Exit Setup Mode: Scan the "Exit Setup Mode" barcode to save the configuration and complete the process.

Note: Some frequently used functions can be configured directly by scanning their corresponding barcodes without entering or exiting setup mode. These barcodes are identified with a ★, such as "★ Power Display".

Enter Setup Mode

Exit Setup Mode

Note: Wireless Version 1.18D later supports setting without entering or exiting settings.

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Restore Wireless Parameters

If the scanner's functionality is disrupted due to accidentally scanning incorrect function setting codes, you can restore the scanner to its default state by scanning the Restore Wireless Parameters barcode.

Restore Wireless Parameters

Instructions:

This function is particularly useful in the following scenarios:

1. An error occurred during scanner setup.
2. You cannot recall the previous settings made on the scanner and wish to reset it to default.
3. You enabled unusual or experimental functions and now want to reset the scanner for standard use.

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Setting Custom Default Settings

With custom default settings, you can configure the default wireless parameters of the scanner to suit your specific needs. These settings will replace the original factory defaults and will remain in effect, even if you perform a wireless parameter reset.

Instructions for Setting Custom Default Settings:

1. Enter Settings Mode:
    a. Scan the "Enter Settings Mode" barcode.
2. Set Wireless Parameters:
    a. Scan the barcode corresponding to the desired wireless parameter function.
3. Exit Settings Mode:
    a. Scan the "Exit Settings Mode" barcode to save and finalize the new default settings.

Important:

- Once configured, the new custom defaults cannot be reverted to the factory settings by using the "Restore Wireless Parameters" function.

Setting Custom Default Settings

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Version

To display the version information of the scanner, scan the barcode into a text processing app.

%%SpecCode39

Display version information

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Communication mode switching

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the "Enter Setup Mode" bar code

2. Scan the barcode corresponding to the desired communication mode:

2.4G Mode

Virtual Bluetooth Mode

Bluetooth HID Mode

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Bluetooth SPP Mode

Bluetooth BLE Mode

3. Scan the "Pair with receiver" barcode. The blue light will start flashing, indicating pairing mode. Alternatively, press the scanner's trigger twice to exit setup mode and return to the previous state.

Pair with receiver

4. Scan the "Exit Setup Mode" barcode to complete the setup.

Exit Setup Mode

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Scanner Matching Steps

USB Dongle Pairing (2.4 G)

The following steps outline how to pair the scanner in 2.4G mode. This process supports operating systems such as Windows XP, Win7, Win8, Win10, and others.

1. Start the scanner and scan the "Enter Setup Mode" barcode.

Enter Setup Mode

2. Scan the "2.4G Mode" barcode to configure the scanner for 2.4G wireless communication

2.4G Mode

3. Scan the "Pair with USB Dongle receiver" barcode and enter the pairing state.
The blue indicator light will begin flashing quickly, indicating the scanner is in pairing mode.
Note: While in pairing mode, the scanner will not emit light when the trigger is pressed.

Pair with USB Dongle receiver

4. Plug the USB Dongle receiver into the computer's USB port. A "beep" sound will confirm successful pairing, and the blue indicator light on the right will remain solid.

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5. Scan the "Exit Setup Mode" barcode to complete the pairing process.

%%ExitSet

Exit Setup Mode

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Bluetooth terminal matching

The scanner can connect via Bluetooth to devices running Android, iOS, or PCs with Bluetooth functionality. There are two methods for pairing the scanner in Bluetooth HID mode.

Method 1: Quick Pairing *(Legacy setting)*

1. Start the scanner and press the button for 8 seconds to enter Bluetooth HID Matching Mode.
    a. The blue light will flash alternately.
2. Enable Bluetooth on the target device and search for "Barcode Scanner HID".
3. Select "ScanAvengerHID" to pair.
4. Upon successful pairing, you will hear a beep, and the blue light will remain solid.

Note: this method is disabled by default on new models.

Method 2: Manual Setup

1. Start the scanner and scan the "Enter Setup Mode" barcode.

Enter Setup Mode

2. Scan the "Bluetooth HID Mode" barcode to set the scanner to Bluetooth HID mode

Bluetooth HID Mode

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3. Scan the "Pair with receiver" barcode. The blue light will start flashing, indicating pairing mode. Alternatively, press the scanner's trigger twice to exit setup mode and return to the previous state.

Pair with receiver

4. Turn on Bluetooth and search for "Barcode Scanner HID" in your device's Bluetooth settings.

5. Select "Barcode Scanner HID" to enter pairing mode

6. Beep confirms successful pairing, and the blue light will remain solid.

7. Scan the "Exit Setup Mode" barcode to complete the setup.

Exit Setup Mode

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Long press 8 seconds into Bluetooth HID search *(Legacy setting)*

The scanner can be configured to quickly initiate Bluetooth HID search mode by holding the button for 8 seconds. Use the steps below to enable or disable this feature.

1. Start the scanner and scan the "Enter Setup Mode" bar code

Enter Setup Mode

2. Configure the Function

Enable long Press 8 Seconds to Enter Bluetooth HID Search

Disable long Press 8 Seconds to Enter Bluetooth HID Search

3. Scan the "Exit Setup Mode" barcode to finalize the configuration

Exit Setup Mode

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Bluetooth SPP Mode (Serial Port Profile)

To enable data transmission via SPP, you must install or develop compatible Bluetooth SPP transmission software. This mode is ideal for transferring large amounts of data.

Bluetooth SPP Pairing Steps:

1. Start the scanner and scan the "Enter Setup Mode" barcode.

Enter Setup Mode

2. Scan the "Bluetooth SPP Mode" setup code.

Bluetooth SPP Mode

3. Scan the "Pair with receiver" barcode. The blue light will start flashing, indicating pairing mode. Alternatively, press the scanner's trigger twice to exit setup mode and return to the previous state.

Pair with receiver

4. Scan the "Exit Setup Mode" barcode to complete the setup.

Exit Setup Mode

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   a. The device will automatically switch to SPP mode and enter the broadcast state.
   b. The device name "ScanAvengerSPP" will be available for selection in the SPP software.
5. Search for " ScanAvengerSPP" in the SPP transmission software.
6. Select " ScanAvengerSPP" to initiate pairing.
7. Wait for the confirmation signal.
   a. A beep sound indicates a successful pairing.
   b. The blue LED will remain steady, confirming the connection.

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Bluetooth BLE Mode (Bluetooth Low Energy)

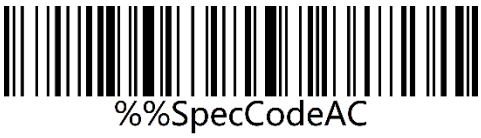
To enable data transmission via BLE, you must install or develop compatible Bluetooth BLE transmission software. This mode is optimized for low-power, small data transfers.

Bluetooth BLE Pairing Steps:

1. Start the scanner and scan the "Enter Setup Mode" barcode.

Enter Setup Mode

2. Scan the " Bluetooth BLE Mode" setup code.



Bluetooth BLE Mode

3. Scan the "Pair with receiver" barcode. The blue light will start flashing, indicating pairing mode. Alternatively, press the scanner's trigger twice to exit setup mode and return to the previous state.

Pair with receiver

4. Scan the "Exit Setup Mode" barcode to complete the setup.

Exit Setup Mode

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   a. The device will switch to BLE mode and enter the broadcast state.
   b. The device name "ScanAvengerBLE" will be available for selection in the BLE software.
5. Search for "ScanAvengerBLE" in the BLE transmission software.
6. Select "ScanAvengerBLE" to initiate pairing.
7. Wait for the confirmation signal.
   a. A beeping sound indicates a successful pairing.
   b. The blue LED will remain steady, confirming the connection.

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Set Bluetooth Name

1. Start the scanner and scan the "enter setup mode" barcode

Enter setup mode

2. Scan "Set Bluetooth Name" Barcode

Set Bluetooth Name

3. Scan the barcode representing the desired Bluetooth name.

Note: The default name is "ScanAvenger".

A. The complete Bluetooth name includes the name + protocol type (e.g., HID, SPP). Changing the name updates all protocol names.

B. The Bluetooth name supports a maximum of 16 bytes. If a barcode exceeds this limit, only the first 16 bytes will be used.

Example: If the new Bluetooth name is Scanner, the Bluetooth HID name becomes Scanner

Sample Bluetooth Name "Scanner"

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4. Scan the "Exit Setup Mode" barcode to save the settings.

Exit Setup Mode

Read Bluetooth Name

To check the current Bluetooth name, scan the "Read Bluetooth Name" barcode.

Read Bluetooth Name

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Battery level display

To check the current power level of the scanner, please scan the "★Battery Level Display" barcode into a text processing app, where the battery percentage will appear.
This function allows to easily monitor the scanner's power level to ensure uninterrupted operation.

★Battery level display

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Wireless transmission modes

The barcode scanner has two operating modes: manual trigger mode and storage mode.

Manual trigger mode

By scanning the "Manual trigger mode" barcode, the scanner immediately transmits the scanned data to the connected device when the trigger is pressed.

★Manual trigger mode*

Storage mode

By scanning the "Storage Mode" barcode, the scanner stores scanned barcode data locally instead of uploading it directly to the connected device. The stored data can be uploaded to the device later as needed, meaning that the scanner can be used in this mode even if temporarily disconnected.

★ Storage mode

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Data Control (Data Processing for Storage Mode)

This section provides instructions for managing stored barcode data in Storage Mode. Use the corresponding barcodes to upload, count, or clear stored data.

Data upload

To upload the data stored in the scanner to a computer, POS, or mobile device, simply scan the "★Data Upload" barcode, which enables the scanner to transmit all stored barcode data to the connected device.

Important: Uploaded data remains stored in the scanner unless cleared using the "Data Clear" function.

★data upload

Sum of the barcodes scanned

To count and upload the total number of barcodes stored in the scanner, simply scan the "★Total Data" barcode. The scanner will send the total count of stored barcodes to the connected device. This feature is useful for inventory tracking and data analysis.

★Total data

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Data clear

To erase all stored barcode data in the scanner, simply scan the "★Data Clear" barcode. The scanner will permanently delete all stored data.

Caution: This action cannot be undone. Ensure that all necessary data has been uploaded before clearing.

%%SpecCode18

%%SpecCode18

★data clear

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Android, iOS system keyboard settings (Bluetooth function)

This section explains how to manage keyboard visibility when using the scanner in Bluetooth HID Mode.

1. To toggle the keyboard display, scan the "★ Hide/Unhide Keyboard" barcode.

%%SpecCode1A

★ Hide/Unhide Keyboard

2. To use a double trigger press to hide/unhide the keyboard, scan the "★ Enable Double Click to Hide/Unhide Keyboard" barcode.

This setting overrides the "★ Hide/Unhide Keyboard" barcode functionality

%%SpecCode7B

★Enable Double click to Hide/Unhide keyboard

3. To deactivate the double trigger press functionality, scan the "★ Disable Double Click to Hide/Unhide Keyboard" barcode.

%%SpecCode7A

★ Disable Double click to Hide/Unhide keyboard

Android System Keyboard Display:

If the virtual keyboard does not appear on some Android devices, contact the supplier for the Bluetooth input method APP, as this may depend on the device manufacturer.

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Transmission Speed Setting

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the "Enter Setup Mode" barcode

Enter Setup Mode

2. Scan the barcode for the desired speed

Fast

Medium

Low

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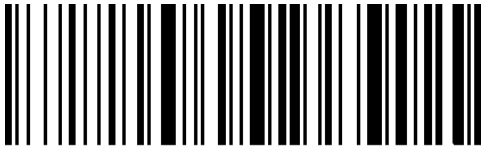
Very Low

3. Scan the "Exit Setup Mode" barcode to save and apply the settings.



Exit Setup Mode

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Sound setting

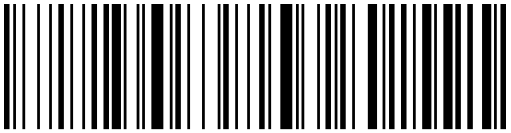
Follow these steps to configure the scanner's sound settings, including volume and buzzer frequency.

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the "Enter Setup Mode" barcode

Enter Setup Mode

2. Scan the barcode for the desired setting:



turn sound off

Low volume

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Middle volume

High volume *

Buzzer frequency 2K *

Buzzer frequency 2.7K

3. Scan the "Exit Setup Mode" barcode to save and apply the settings.

Exit Setup Mode

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Vibration setting

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan into the setup mode barcode

Enter Setup Mode

2. Scan the barcode for the desired setting

Turn Off Vibration (optional)

Turn On Vibration (optional)

3. Scan the "Exit Setup Mode" barcode to save the settings

Note: The vibration function is already enabled on certain scanners.

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Sleep time setting

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan into the setup mode barcode

Enter Setup Mode

2. Select the sleep interval code

Sleep interval 30s

Sleep interval 1min

Sleep interval 2min

Sleep interval 5min

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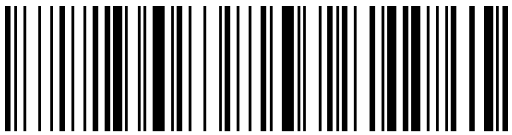
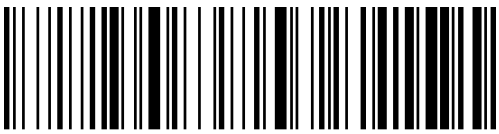
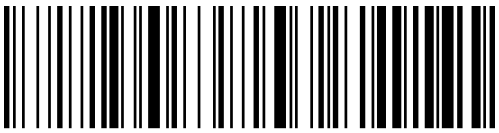
Sleep interval 10min



Sleep interval 30min



Never Sleep



Sleep Immediately

3. Scan "Exit Setup Mode" code

Exit Setup Mode

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Language Settings Table

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the setup mode barcode

Enter Setup Mode

2. Select the desired keyboard language

English(US)

German

French

Spanish

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Italian

Japanese

Belgian French

Portuguese

English (UK)

German IOS keyboard

Brazilian Portuguese

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Russian

Czech

142 Italy 142

Q (Turkey Q)

F (Turkey F)

Sweden / Finland

Mexican Spanish

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Denmark

Written Norwegian

Croatian/Serbian

Swiss German

Swiss French

Dutch

Hungarian

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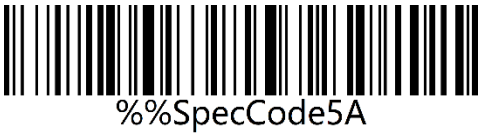

Polish

Canadian French

Argentina (Latin American)

Slovak

Thai

International keyboard

3. Scan the "Exit Setup Mode" barcode to save and apply the settings.

Exit Setup Mode

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Note: Enabling the International Keyboard may slightly reduce transmission speed. Additionally, the International General Keyboard supports a wide range of smaller languages commonly used on PC platforms.

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Suffix setting

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the "Enter Setup Mode" barcode

Enter Setup Mode

2. Scan the appropriate terminator according to your requirements.
(The default is CR – Carriage return)

Add CR*

Add LF

Add CR+LF

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Add TAB

None

3. Scan the "Exit Setup Mode" barcode to save and apply the settings.

Exit Setup Mode

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Case conversion settings

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the "Enter Setup Mode" barcode

Enter Setup Mode

2. Scan the barcode corresponding to your desired setting.

Convert to lowercase

Convert to uppercase

Case interchange

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No Case Conversion (Default)

3. Scan the "Exit Setup Mode" barcode to save and apply the settings.

Exit Setup Mode

Note: This feature is supported only in firmware versions 1.18D and later.

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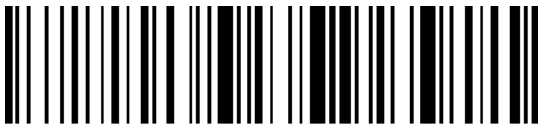
Hidden Character GS Replacement Function

This function allows you to replace or restore the GS character bit in a barcode. Follow these steps to configure the settings:

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the "Enter Setup Mode" barcode



Enter Setup Mode

2. Scan the "Set GS Character" barcode

Set GS Character

3. From the table "Characters' Barcodes Appendix", scan the barcode corresponding to the desired replacement character or setting.

Example: If the GS character is not being detected and you need to restore it, scan barcode below after scanning the "Set GS Character" barcode

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4. Scan the "Exit Setup Mode" barcode to save and apply the changes.

Exit Setup Mode

To disable this functionality, please scan the "Disable Set GS Character"

Disable Set GS Character

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Hidden Character Settings

This product supports hiding characters from the beginning or end of the barcode. Follow the steps below to configure hidden character settings.

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

1. Start the scanner and scan the "Enter Setup Mode" barcode

%%EnterSet

Enter Setup Mode

2. Choose Hidden Position:

A. To hide characters from the front of the barcode, scan the "-Hide Characters from Barcode Start" barcode.

B. To hide characters from the back of the barcode, scan the "-Hide Characters from Barcode End" barcode.

%%SpecCodeA0

Hide Characters from Barcode Start

%%SpecCodeA1

Hide Characters from Barcode End

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3. Scan the barcode corresponding to the number of characters which needs to be hidden.

%%01

Hide 1 bits

%%02

Hide 2 bits

%%03

Hide 3 bits

%%04

Hide 4 bits

4. Scan the "Exit Setup Mode" barcode to save and apply the settings.

%%ExitSet

Exit Setup Mode

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Advanced Configurations

Character sets

To set up a custom key emulation from the "Character Set Action Appendix", determine:

- The keys to emulate
- Their corresponding character set column and HEX values (needed for configuration)

Then, scan the barcode for the required character set from the "Available Character Sets Appendix."

Note: Use Character Set 3 to receive as output the characters from the "ASCII" column.

Afterwards, follow the following steps:

1. Scan the "Enter Setup Mode" bar code

Enter setup mode

2. Scan this if you want to add the key(s) as a prefix:

Set prefix

3. Scan this if you want to add the key(s) as a suffix:

Set suffix

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Add Key(s) – Find barcodes matching the key's HEX value in the "Characters' Barcodes Appendix", then scan them as needed.

4. Scan "Exit Settings Mode" bar code, complete settings

Exit setup mode

To reset the configuration, scan the Character Set 0 Barcode (default). Additionally, scan the barcode for prefix or suffix to reset those configurations.

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Control the character escape

To edit the output according to the Control character set (USB keyboard mode), use the barcode below

Enable control the character escape

Disable control the character escape (default)

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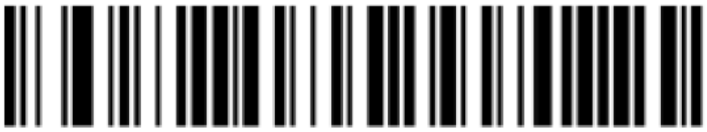
Factory Reset Steps

Reset steps for Dongle connection

1. Unplug the USB Dongle.
2. Scan the barcodes below in order.
    a. No need to print these codes, they can be scanned from the screen.
    b. The scanner may not make sounds or vibrate while scanning certain codes, this is normal behavior.

Step 1



Step 2

%%SpecCode93

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Step 3

%%SpecCode79

Step 4

%%SpecCode77

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Step 5

%%SpecCode35

Step 6

%%SpecCode95

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Step 7

%%SpecCode7B

Step 8

%%SpecCode9C

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Step 9

Step 10

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Step 11

%%SpecCode92

Step 12

%%SpecCodeA8

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Step 13

%%SpecCode99

3. Plug the Dongle back in.
4. Confirm connection.
    a. Your scanner will pair with the dongle.
    b. A solid blue light on the scanner confirms a successful connection.

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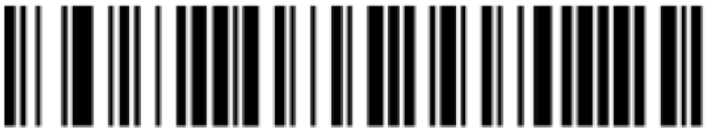
Reset steps for Bluetooth connection

1. Remove Existing Connection:
    a. Go to your device's Bluetooth Settings → Connections.
    b. Remove "ScanAvenger HID" from the list.
2. Scan the Barcodes Below in Order:
    a. No need to print these codes, they can be scanned from the screen.
    b. The scanner may not make sounds or vibrate while scanning certain codes, this is normal behavior.

Step 1



Step 2

%%SpecCode93

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Step 3

%%SpecCode79

Step 4

%%SpecCode77

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Step 5

%%SpecCode35

Step 6

%%SpecCode95

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Step 7

%%SpecCode7B

Step 8

%%SpecCode9C

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Step 9

Step 10

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Step 11

%%SpecCode92

Step 12

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Step 13

%%SpecCode99

3. Pair the Scanner:
    a. The scanner light should start flashing blue, indicating it's ready to pair.
    b. Go to Bluetooth Settings and select "ScanAvengerHID" to pair. If it doesn't appear, refresh the Bluetooth search.
    c. A solid blue light on the scanner confirms a successful connection.

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Appendix

Barcode type ID Table

Barcode type	HEX	CODE ID (Factory default)
All code types	99	<N/A>
Codabar	61	a
Code128	6A	j
Code32	3C	<
Code93	69	i
Code39	62	b
Code11	48	H
EAN-13	64	d
EAN-8	64	d
GS1 DataBar	79	y
GS1-128 (EAN-128)	6A	j
Interleaved 2 of 5	65	e
Matrix 2 of 5	76	v
Industry 2 of 5	44	D
UPC-A	63	c

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UPC-E	63	c
ISBN	42	B
ISSN	6E	n
Aztec Code	7A	z
DataMatrix	75	u
PDF417	72	r
Micro PDF417	53	S
QR Code	51	Q
Micro QR Code	51	Q

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ASCII Visible Characters Table

Decimal system	Hex	Character	Decimal system	Hex	Character	Decimal system	Hex	Character
32	20	<SPACE>	107	6B	k	182	B6	¶
33	21	!	108	6C	l	183	B7	·
34	22	"	109	6D	m	184	B8	¸
35	23	#	110	6E	n	185	B9	¹
36	24	$	111	6F	o	186	BA	º
37	25	%	112	70	p	187	BB	»
38	26	&	113	71	q	188	BC	¼
39	27	'	114	72	r	189	BD	½
40	28	(	115	73	s	190	BE	¾
41	29	)	116	74	s	191	BF	¿
42	2A	*	117	75	u	192	C0	À
43	2B	+	118	76	v	193	C1	Á
44	2C	,	119	77	w	194	C2	Â
45	2D	-	120	78	x	195	C3	Ã
6	2E	.	121	79	y	196	C4	Ä
47	2F	/	122	7A	z	197	C5	Å
48	30	0	123	7B	{	198	C6	Æ
49	31	1	124	7C	|	199	C7	Ç
50	32	2	125	7D	}	200	C8	È
51	33	3	126	7E	~	201	C9	É
52	34	4	127	7F	DEL	202	CA	Ê
53	35	5	128	80	€	203	CB	Ë

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54	36	6	129	81	*Unused*	204	CC	Ì
55	37	7	130	82	‚	205	CD	Í
56	38	8	131	83	*ƒ*	206	CE	Î
57	39	9	132	84	„	207	CF	Ï
58	3A	:	133	85	…	208	D0	Đ
59	3B	;	134	86	†	209	D1	Ñ
60	3C	<	135	87	‡	210	D2	Ò
61	3D	=	136	88	ˆ	211	D3	Ó
62	3E	>	137	89	‰	212	D4	Ô
63	3F	?	138	8A	Š	213	D5	Õ
64	40	@	139	8B	‹	214	D6	Ö
65	41	A	140	8C	Œ	215	D7	×
66	42	B	141	8D	Unused	216	D8	Ø
67	43	C	142	8E	Ž	217	D9	Ù
68	44	D	143	8F	*Unused*	218	DA	Ú
69	45	E	144	90	*Unused*	219	DB	Û
70	46	F	145	91	‘	220	DC	Ü
71	47	G	146	92	’	221	DD	Ý
72	48	H	147	93	“	222	DE	Þ
73	49	I	148	94	”	223	DF	ß
74	4A	J	149	95	•	224	E0	à
75	4B	K	150	96	–	225	E1	á
76	4C	L	151	97	—	226	E2	â
77	4D	M	152	98	˜	227	E3	ã
78	4E	N	153	99	™	228	E4	ä

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79	4F	O	154	9A	š	229	E5	å
80	50	P	155	9B	›	230	E6	æ
81	51	Q	156	9C	œ	231	E7	ç
82	52	R	157	9D	*Unused*	232	E8	è
83	53	S	158	9E	ž	233	E9	é
84	54	T	159	9F	Ÿ	234	EA	ê
85	55	U	160	A0	NBSP	235	EB	ë
86	56	V	161	A1	¡	236	EC	ì
87	57	W	162	A2	¢	237	ED	í
88	58	X	163	A3	£	238	EE	î
89	59	Y	164	A4	¤	239	EF	ï
90	5A	Z	165	A5	¥	240	F0	ð
91	5B	[	166	A6	¦	241	F1	ñ
92	5C	\	167	A7	§	242	F2	ò
93	5D	]	168	A8	¨	243	F3	ó
94	5E	^	169	A9	©	244	F4	ô
95	5F	_	170	AA	ª	245	F5	õ
96	60	`	171	AB	«	246	F6	ö
97	61	a	172	AC	¬	247	F7	÷
98	62	b	173	AD	-	248	F8	ø
99	63	c	174	AE	®	249	F9	ù
100	64	d	175	AF	¯	250	FA	ú
101	65	e	176	B0	°	251	FB	û
102	66	f	177	B1	±	252	FC	ü
103	67	g	178	B2	²	253	FD	ý

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104	68	h	179	B3	³	254	FE	þ
105	69	i	180	B4	´	255	FF	ÿ
106	6A	j	181	B5	µ			

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Data and Edit Barcode Appendix

0

1

2

3

4

5

6

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7

8

9

A

B

C

D

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E

F

Cancel current setting

Cancel a previously read

Cancel a previously read string of data

Save

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Characters' Barcodes Appendix

To avoid scanning the wrong code by mistake, it is recommended to cover adjacent codes while scanning the intended one. This ensures accurate setup and prevents unintended changes to the configuration.

HEX Value	Character	1D Setup Code	2D Setup Code
01	SOH (Character set 3 needs to be enabled)	%%01	%%01
02	STX (Character set 3 needs to be enabled)	%%02	%%02
03	ETX (Character set 3 needs to be enabled)	%%03	%%03
04	EOT (Character set 3 needs to be enabled)	%%04	%%04
05	ENQ (Character set 3 needs to be enabled)	%%05	%%05

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06	ACK (Character set 3 needs to be enabled)	%%06	%%06
07	BEL (Character set 3 needs to be enabled)	%%07	%%07
08	Back Space	%%08	%%08
09	Tab (HT)	%%09	%%09
0A	LF	%%0A	%%0A
0B	NULL (can be used to set "VT" with Character Set 3)	%%0B	%%0B
0C	NULL (can be used to set "FF" with Character Set 3)	%%0C	%%0C

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0D	CR	%%0D	%%0D
0E	F1	%%0E	%%0E
0F	F2	%%0F	%%0F
10	F3	%%10	%%10
11	F4	%%11	%%11
12	F5	%%12	%%12
13	F6	%%13	%%13

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14	F7	%%14	%%14
15	F8	%%15	%%15
16	F9	%%16	%%16
17	F10	%%17	%%17
18	F11	%%18	%%18
19	F12	%%19	%%19
1A	NULL (can be used to set "SUB" with Character Set 3)	%%1A	%%1A

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1B	Esc	%%1B	%%1B
1C	FS	%%1C	%%1C
1D	GS	%%1D	%%1D
1E	NULL (can be used to set "RS" with Character Set 3)	%%1E	%%1E
1F	NULL (can be used to set "US" with Character Set 3)	%%1F	%%1F
20	Space	%%20	%%20
21	!	%%21	%%21

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22	"	%%22	%%22
23	#	%%23	%%23
24	$	%%24	%%24
25	%	%%25	%%25
26	&	%%26	%%26
27	'	%%27	%%27
28	(	%%28	%%28

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29	)	%%29	%%29
2A	*	%%2A	%%2A
2B	+	%%2B	%%2B
2C	,	%%2C	%%2C
2D	-	%%2D	%%2D
2E	.	%%2E	%%2E
2F	/	%%2F	%%2F

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30	0	%%30	%%30
31	1	%%31	%%31
32	2	%%32	%%32
33	3	%%33	%%33
34	4	%%34	%%34
35	5	%%35	%%35
36	6	%%36	%%36

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37	7	%%37	%%37
38	8	%%38	%%38
39	9	%%39	%%39
3A	:	%%3A	%%3A
3B	;	%%3B	%%3B
3C	<	%%3C	%%3C
3D	=	%%3D	%%3D

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3E	>	%%3E	%%3E
3F	?	%%3F	%%3F
40	@	%%40	%%40
41	A	%%41	%%41
42	B	%%42	%%42
43	C	%%43	%%43
44	D	%%44	%%44

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45	E	%%45	%%15
46	F	%%46	%%16
47	G	%%47	%%17
48	H	%%48	%%18
49	I	%%49	%%19
4A	J	%%4A	%%1A
4B	K	%%4B	%%1B

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4C	L	%%4C	%%4C
4D	M	%%4D	%%4D
4E	N	%%4E	%%4E
4F	O	%%4F	%%4F
50	P	%%50	%%50
51	Q	%%51	%%51
52	R	%%52	%%52

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53	S	%%53	%%53
54	T	%%54	%%54
55	U	%%55	%%55
56	V	%%56	%%56
57	W	%%57	%%57
58	X	%%58	%%58
59	Y	%%59	%%59

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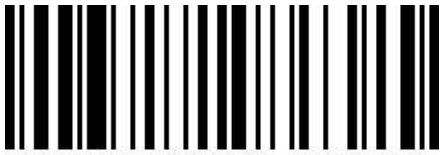
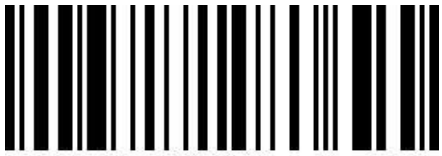
5A	Z	%%5A	%%5A
5B	[	 %%5B	%%5B
5C	\	%%5C	%%5C
5D	]	%%5D	%%5D
5E	^	%%5E	%%5E
5F	_	 %%5F	%%5F
60	`	%%60	%%60

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61	a	%%61	%%61
62	b	%%62	%%62
63	c	%%63	%%63
64	d	%%64	%%64
65	e	%%65	%%65
66	f	%%66	%%66
67	g	%%67	%%67

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68	h	%%68	%%68
69	i	%%69	%%69
6A	j	%%6A	%%6A
6B	k	%%6B	%%6B
6C	l	%%6C	%%6C
6D	m	%%6D	%%6D
6E	n	%%6E	%%6E

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6F	o	%%6F	%%6F
70	p	%%70	%%70
71	q	%%71	%%71
72	r	%%72	%%72
73	s	%%73	%%73
74	t	%%74	%%74
75	u	%%75	%%75

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76	v	%%76	%%76
77	w	%%77	%%77
78	x	%%78	%%78
79	y	%%79	%%79
7A	z	%%7A	%%7A
7B	{	%%7B	%%7B
7C	|	%%7C	%%7C

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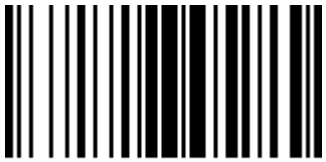
7D	}	%%7D	%%7D
7E	~	%%7E	%%7E
7F	DEL	%%7F	%%7F
80	€	%%80	%%80
81	*Unused*	%%81	%%81
82	‚	%%82	%%82
83	*ƒ*	 %%83	%%83

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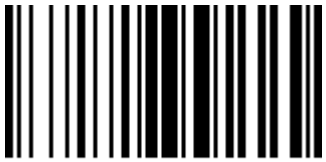
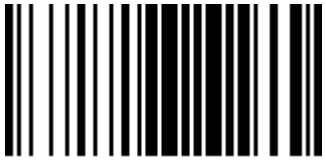
84	„	 %%84	%%84
85	…	%%85	%%85
86	†	%%86	%%86
87	‡	%%87	%%87
88	ˆ	%%88	%%88
89	‰	 %%89	%%89
8A	Š	%%8A	%%8A

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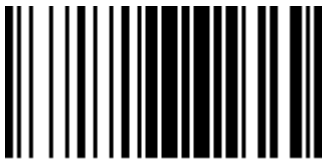
8B	‹	%%8B	%%8B
8C	Œ	%%8C	%%8C
8D	*Unused*	%%8D	%%8D
8E	Ž	%%8E	%%8E
8F	*Unused*	%%8F	%%8F
90	*Unused*	 %%90	%%90
91	‘	%%91	%%91

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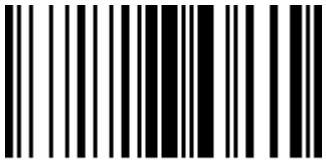
92	’	 %%92	%%92
93	”	%%93	%%93
94	”	%%94	%%94
95	•	%%95	%%95
96	–	%%96	%%96
97	—	%%97	%%97
98	˜	%%98	%%98

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99	™	%%99	%%99
9A	š	%%9A	%%9A
9B	›	%%9B	%%9B
9C	œ	%%9C	%%9C
9D	*Unused*	%%9D	%%9D
9E	ž	%%9E	%%9E
9F	Ÿ	%%9F	%%9F

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A0	NBSP	%%A0	%%A0
A1	¡	%%A1	%%A1
A2	¢	%%A2	%%A2
A3	£	%%A3	%%A3
A4	¤	%%A4	%%A4
A5	¥	%%A5	%%A5
A6	¦	%%A6	%%A6

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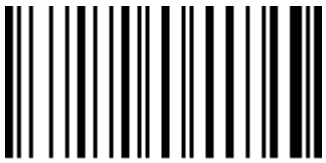
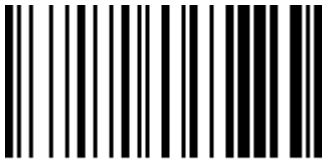
A7	§	%%A7	%%A7
A8	¨	%%A8	%%A8
A9	©	%%A9	%%A9
AA	ª	 %%AA	%%AA
AB	«	%%AB	%%AB
AC	¬	%%AC	%%AC
AD	-	 %%AD	%%AD

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AE	®	%%AE	%%AE
AF	¯	%%AF	%%AF
B0	°	%%B0	%%B0
B1	±	%%B1	%%B1
B2	²	%%B2	%%B2
B3	³	%%B3	%%B3
B4	´	%%B4	%%B4

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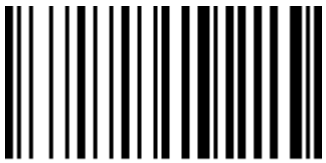
B5	µ	%%B5	%%B5
B6	¶	 %%B6	%%B6
B7	·	%%B7	%%B7
B8	¸	%%B8	%%B8
B9	¹	%%B9	%%B9
BA	º	%%BA	%%BA
BB	»	%%BB	%%BB

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BC	¼	%%BC	%%BC
BD	½	%%BD	%%BD
BE	¾	%%BE	%%BE
BF	¿	%%BF	%%BF
C0	À	%%C0	%%C0
C1	Á	%%C1	%%C1
C2	Â	%%C2	%%C2

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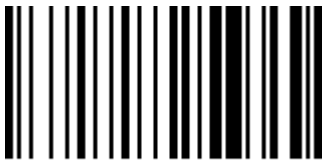
C3	Ã	%%C3	%%C3
C4	Ä	 %%C4	%%C4
C5	Å	%%C5	%%C5
C6	Æ	%%C6	%%C6
C7	Ç	%%C7	%%C7
C8	È	%%C8	%%C8
C9	É	%%C9	%%C9

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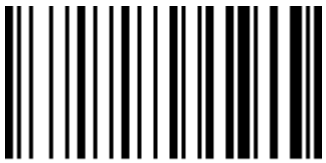
CA	Ê	%%CA	%%CA
CB	Ë	 %%CB	%%CB
CC	Ì	%%CC	%%CC
CD	Í	%%CD	%%CD
CE	Î	%%CE	%%CE
CF	Ï	%%CF	%%CF
D0	Ð	%%D0	%%D0

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D1	Ñ	%%D1	%%D1
D2	Ò	%%D2	%%D2
D3	Ó	%%D3	%%D3
D4	Ô	%%D4	%%D4
D5	Õ	%%D5	%%D5
D6	Ö	%%D6	%%D6
D7	×	%%D7	%%D7

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D8	Ø	%%D8	%%D8
D9	Ù	%%D9	%%D9
DA	Ú	%%DA	%%DA
DB	Û	%%DB	%%DB
DC	Ü	%%DC	%%DC
DD	Ý	%%DD	%%DD
DE	Þ	%%DE	%%DE

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DF	ß		
E0	à		
E1	á		
E2	â		
E3	ã		
E4	ä		
E5	å		

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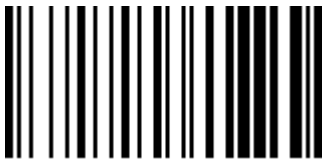
E6	æ	%%E6	%%E6
E7	ç	%%E7	%%E7
E8	è	%%E8	%%E8
E9	é	%%E9	%%E9
EA	ê	 %%EA	%%EA
EB	ë	%%EB	%%EB
EC	ì	%%EC	%%EC

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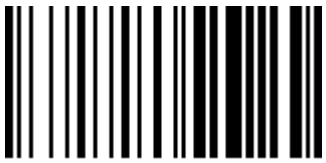
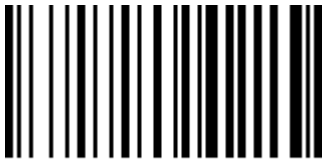
ED	í	%%ED	%%ED
EE	î	%%EE	%%EE
EF	ï	%%EF	%%EF
F0	ð	 %%F0	%%F0
F1	ñ	%%F1	%%F1
F2	ò	%%F2	%%F2
F3	ó	 %%F3	%%F3

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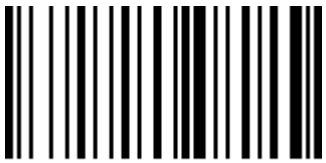
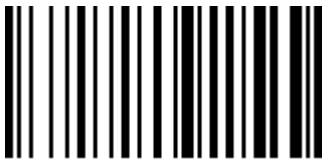
F4	ô	%%F4	%%F4
F5	õ	 %%F5	%%F5
F6	ö	%%F6	%%F6
F7	÷	%%F7	%%F7
F8	ø	 %%F8	%%F8
F9	ù	%%F9	%%F9
FA	ú	%%FA	%%FA

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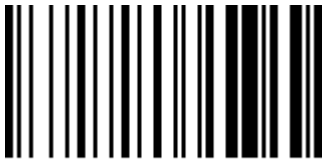
FB	û		
FC	ü		
FD	ý		
FE	þ		
FF	ÿ		

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AIM ID Table

Barcode type	AIM ID	instructions
Codabar	]Fm	m: 0~1
Code128	]C0	m: 0, 1, 2, 4
Code32	]A0	
Code93	]G0	
Code39	]Am	m: 0, 1, 3, 4, 5, 7
Code11	]Hm	m: 0, 1, 3, 8, 9
EAN-13 / EAN-8	]Em	m: 0, 1, 3, 4
GS1 DataBar	]e0	
GS1-128 (EAN-128)	]C1	
Interleaved 2 of 5	]Im	m: 0, 1, 3
Matrix 2 of 5	]X0	
Industry 2 of 5	]S0	
UPC-A/ UPC-E	]Em	m: 0, 3
ISBN	]X0	
ISSN	]X0	
Aztec Code	]z0	

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DataMatrix	]dm	m: 0~6
PDF417 / Micro PDF417	]Lm	m: 0~5
QR Code / Micro QR Code	]Qm	m: 0~6

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Character Set Action Appendix

Use the table below to find the action you want the scanner to perform with a specific character set:

HEX	DEC	ASCII	Set 0	Set 1	Set 2	Set 3	Set 4
01	1	SOH	NULL	Home	Ctrl+A	Alt+001	Numpad enter
02	2	STX	Ctrl+B	End	Ctrl+B	Alt+002	Cap lock
03	3	ETX	Ctrl+C	Up Arrow	Ctrl+C	Alt+003	Right Arrow
04	4	EOT	Custom 1	Down Arrow	Ctrl+D	Alt+004	Up Arrow
05	5	ENQ	Custom 2	Left Arrow	Ctrl+E	Alt+005	NULL
06	6	ACK	Custom 3	Right Arrow	Ctrl+F	Alt+006	NULL
07	7	BEL	Custom 4	Shift+Tab	Ctrl+G	Alt+007	Enter
08	8	BS	Back Space	Back Space	Back Space	Alt+008	Left Arrow
09	9	HT	Tab	Tab	Tab	Alt+009	Tab
0A	10	LF	Enter	Enter	Ctrl+J	Alt+010	Down Arrow
0B	11	VT	NULL	NULL	Ctrl+K	Alt+011	Tab
0C	12	FF	NULL	NULL	Ctrl+L	Alt+012	Delete
0D	13	CR	Enter	Enter	Enter	Alt+013	Enter
0E	14	SO	F1	Page Up	Ctrl+N	Alt+014	Insert
0F	15	SI	F2	Page Down	Ctrl+O	Alt+015	Esc
10	16	DLE	F3	F11	Ctrl+P	Alt+016	F11
11	17	DC1	F4	NULL	Ctrl+Q	Ctrl+Q	Home
12	18	DC2	F5	NULL	Ctrl+R	Alt+018	Print Screen
13	19	DC3	F6	NULL	Ctrl+S	Alt+019	Back Space

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14	20	DC4	F7	NULL	Ctrl+T	Alt+020	Shift tab
15	21	NAK	F8	F12	Ctrl+U	Alt+021	F12
16	22	SYN	F9	F1	Ctrl+V	Alt+022	F1
17	23	ETB	F10	F2	Ctrl+W	Alt+023	F2
18	24	CAN	F11	F3	Ctrl+X	Alt+024	F3
19	25	EM	F12	F4	Ctrl+Y	Alt+025	F4
1A	26	SUB	NULL	FS	Ctrl+Z	Alt+026	F5
1B	27	Esc	Esc	F6	Ctrl+[	Alt+027	F6
1C	28	FS	ALT+028	F7	Ctrl+\	Alt+028	F7
1D	29	GS	ALT+029	F8	Ctrl+]	Alt+029	F8
1E	30	RS	NULL	F9	Ctrl+^	Alt+030	F9
1F	31	US	NULL	F10	Ctrl+_	Alt+031	F10

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Available Character Sets Appendix

Your scanner supports multiple character sets for customization. The available sets are:

Character Set 0 (Default)

Character Set 1

Character Set 2

Character Set 3

Character Set 4

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Control character set (USB keyboard mode)

Decimal system	*Hex*	*Corresponding key value (control character escape off)*	*Corresponding key value (control characters are escaped)*
0	00	Keep	Ctrl+@
1	01	Insert	Ctrl+A
2	02	Home	Ctrl+B
3	03	End	Ctrl+C
4	04	Delete	Ctrl+D
5	05	PageUp	Ctrl+E
6	06	PageDown	Ctrl+F
7	07	ESC	Ctrl+G
8	08	Backspace	Ctrl+H
9	09	Tab	Ctrl+I
10	0A	Enter (Performance is affected by carriage return and line feed processing configuration)	Ctrl+J
11	0B	Caps Lock	Ctrl+K
12	0C	Print Screen	Ctrl+L
13	0D	Enter (Performance is affected by carriage return and line feed processing configuration)	Ctrl+M
14	0E	Scroll Lock	Ctrl+N
15	0F	Pause/Break	Ctrl+O

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16	10	F11	Ctrl+P
17	11	Direction key ↑	Ctrl+Q
18	12	Direction key ↓	Ctrl+R
19	13	Direction key ←	Ctrl+S
20	14	Direction key →	Ctrl+T
21	15	F12	Ctrl+U
22	16	F1	Ctrl+V
23	17	F2	Ctrl+W
24	18	F3	Ctrl+X
25	19	F4	Ctrl+Y
26	1A	F5	Ctrl+Z
27	1B	F6	Ctrl+[
28	1C	F7	Ctrl+\
29	1D	F8	Ctrl+]
30	1E	F9	Ctrl+^
31	1F	F10	Ctrl+_

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Control character set (serial port and USB virtual serial port)

When connected via serial port, the following characters are shown when the scanner has configured with the corresponding hex values, regardless of which character set has been selected.

Decimal system	Hex	Character
0	00	NUL
1	01	SOH
2	02	STX
3	03	ETX
4	04	EOT
5	05	ENQ
6	06	ACK
7	07	BEL
8	08	BS
9	09	HT
10	0A	LF
11	0B	VT
12	0C	FF
13	0D	CR
14	0E	SO
15	0F	SI
16	10	DLE
17	11	DC1
18	12	DC2
19	13	DC3
20	14	DC4

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21	15	NAK
22	16	SYN
23	17	ETB
24	18	CAN
25	19	EM
26	1A	SUB
27	1B	ESC
28	1C	FS
29	1D	GS
30	1E	RS
31	1F	US

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