BCST-41

Bluetooth® 2D Barcode Scanner

Instruction Manual

Content

Notes

Safety Notes

Please do not dismantle the barcode scanner or place any foreign parts in it to prevent short circuit or circuit damage.

Please do not leave the barcode scanner or battery near fire.

Maintenance Notes

Use a clean wet mop to wipe the outer shell of the barcode scanner.

Store the barcode scanner at the place that is dustless, dry, away from light and strong magnetic area.

If any malfunctions happen, please record the situation, and contact our customer service.

Product Overview

Product Specification

Model	BCST-41
Material	PC+TPU
Voltage	DC 5V
Battery Capacity	1200mAh
Barcode Supported	Codabar, Code 11, Code 128, GS1-128, USPS, FedEx, Code 39, Code 32, Code 93, EAN-8, EAN-13, ISBN, ISSN, MSI, UPC-A, UPC-E, IATA 25, Industrial 25 / Standard 25, Interleaved 25, Matrix 25, China Postal Code, Plessey, Telepen
Resolution	3mil
Scan Method	Auto/Manual
Lowest Contrast	20%
Decoding Angle	Turning Angle 30°, Elevation Angle 75°, Deflection Angle 80°
Bluetooth Version	Bluetooth 5.0
Bluetooth Communication	2.402GHz~2.480GHz
Bluetooth Transmission Power	4dbm

LED Indicator

Indicator Status	Explanations
Green LED flashes	Bluetooth reconnection
Green LED flashes once	Successful scanning and data is uploaded
Blue LED flashes	Bluetooth pairing
Blue LED flashes once	Scan is successful and data is stored in buffer
Blue LED is on	Under setup mode
Yellow LED flashes	Battery is running short
Red LED is on	Under charging (Red LED goes off once the barcode scanner is fully charged)

Buzzer

Sounds	Explanations
One short high-note sound (100ms)	Successful scanning
One short high-note sound (20ms)	Data has been uploaded from buffer to computer/phone
One long high-note sound (400ms)	Wrong settings (under setup mode, blue LED lit) Failed Bluetooth pairing (ring only during pairing) The buffer is full, barcode is not stored, and the scan is invalid
Two or more long high-note sound (800ms)	The USB is under configuration
Three-note chord (volume from low to high)	Enter setup mode (blue LED lit) Exit setup mode (blue LED off)
Three-note chord (volume from high to low)	Remind of Bluetooth connection
Two short sounds (same volume)	The Bluetooth connection has stopped
Two short sounds (volume from low to high)	Indicate correct settings
Two short sounds (volume from high to low)	The BCST-41 has disconnected from a computer/phone
Two long sounds (volume from high to medium)	The scanner has been powered on under wireless mode (with USB disconnected)
Two long sounds (volume from medium to high)	The scanner has been powered off under wireless mode (with USB disconnected)

Barcodes Supported

The barcode types supported by the BCST-41 can be found in the chart below. For more details, please refer to the barcode type setting in Barcode Type Setting.

Barcodes Supported		Preset
Codabar		Enabled
Code 11		Disabled
Code 128		Enabled
GS1-128 (UCC/EAN-128)		Disabled
USPS		Enabled
FedEx		Enabled
Code 39		Enabled
Code 32		Disabled
Code 93		Enabled
EAN-8		Enabled
EAN-13		Enabled
ISBN		Disabled
ISSN		Disabled
MSI		Disabled
UPC- A		Enabled
UPC- E		Enabled
2 of 5 barcodes	IATA 2 of 5	Disabled
	Interleaved 2 of 5	Enabled
	Matrix 2 of 5	Disabled
	Standard 2 of 5 / Industrial 2 of 5	Disabled
GS1 DataBar, GS1 DataBar Expanded, GS1 DataBar Limited		Enabled

How to Set up the Scanner

You may change the settings of BCST-41 barcode scanner by reading the setting barcode in this manual. The examples of settings for the BCST-41 scanner are as below.

Note: If there is a (*) before a certain setting barcode in this manual, it indicates the factory preset.

Steps	Operation	
1	Long press the scan button for 3s to power on the scanner.	
2	Scan the barcode to enter setup mode. Enter Setup	
3	Read the setting barcode, such as: Enable Codabar	
4	Read the barcode to exit setup mode Exit and Save	To clear a wrongly scanned setting barcode, read the barcode below. Exit without Save

Basic Settings

System Setting

The BCST-41 is compatible with Windows, Android, Mac OS, and iOS operating systems. The default compatible systems are Windows and Android. You may scan the barcodes below to set the operating system you want to work with.

Note: If you want to use the BCST-41 with an Android device, please use the Gboard input method, and set the scanner as "Windows/Android Mode" and the input keyboard as "American Keyboard". The barcode scanner supports Gboard input method and will not be affected by the language setting of the Gboard input method.

(*) Windows/Android Mode	Mac OS/iOS Mode

Keyboard Setting

(*) US Keyboard	German Keyboard
French Keyboard	Spanish Keyboard
Italian Keyboard	UK Keyboard

||||||||||||||||||||||||||||

Enter Setup

||||||||||||||||||||||||||||||||

Japanese Keyboard (Roman Character)

||||||||||||||||||||||||||||||||

CanadianKeyboard

||||||||||||||||||||||||||||||||

Serbian Keyboard

Write to Custom Defaults

You may change factory defaults and customize some functions suitable for your own applications when using your scanner. You need to scan 'Enter Setup' → 'Function setup barcode you want to customize (e.g.: Output Code ID)' →"Write to Custom Defaults" in turn.

If you have reconfigured the scanner and want to restore to its custom setting mode, you may scan the "Enter Setup" - "Restore to Custom Defaults" barcodes as below. The barcode scanner will exit the setup mode after restoring to custom defaults.

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Write to Custom Defaults

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Restore to Custom Defaults

Restore Factory Setting

You may use the "Restore Factory Setting" under the circumstances below:

1. Wrong configuration on the barcode scanner or failure to read barcodes.

2. Previous settings are forgotten while users do not want them to affect future barcode scanning.

3. To restore to initial setting after the use of some rarely used configuration.

Scan the "Enter Setup" - "Restore Factory Setting" barcodes in turn. There is no need to read the "Exit and Save" barcode.

Note: If you have restored factory settings for the barcode scanner, the data stored under inventory mode will be cleared.

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Exit and Save

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Enter Setup

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Restore Factory Setting

Reveal Software Version Number

Scan the barcode "Enter Setup" - "Reveal Software Version Number". The software version number will be output to the device connected with the BCST-41.

The "Reveal Software Version Number" function is a kind of setting, so you need to scan the "Exit and Save" barcode after getting the software version number revealed.

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Reveal Software Version Number

Reveal Battery Status

If you want to know the remaining battery volume of the BCST-41, you may scan the barcode "Reveal Battery Status" without scanning the "Enter Setup" barcode. And the remaining battery amount will be output to the device connected with the BCST-41.

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Reveal Battery Status

Data Transmission Speed

The product defaults working under high-speed transmission mode. By default, the data transmission interval is 0ms, which can improve your working efficiency.

If you want to use the product with some low-speed software (like the Excel on Android phones), please adjust the data transmission interval accordingly, as the issue of data loss or garbled characters can happen if the interval is too short.

||||||||||||||||||||||||||||

Exit and Save

||||||| |||	||||||| ||||| |||||							(*) Set Data Transmission Interval as 0ms	||||||| |||	||||||| ||||| |||||							Set 02Data Transmission Interval as 16ms
Set Data Transmission Interval as 32ms	Set Data Transmission Interval as 64ms
Set Data Transmission Interval as 96ms	Set Data Transmission Interval as 128ms

Set Data Transmission Interval as 256ms

Auto Sleep

To save battery, you may set the interval for the scanner to enter auto sleep mode. The preset interval is 10 minutes.

(*) Enable Auto Sleep	Disable Auto Sleep
Set Auto Sleep Interval as 1min	Set Auto Sleep Interval as 3min
Set Auto Sleep Interval as 5min	(*)Set Auto Sleep Interval as 10min

||||||||||||||||||||||||||

Enter Setup

Set Auto Sleep Interval as 30min	Set Auto Sleep Interval as 60min

Buffer Settings

When the scanner is out of the transmission range, the barcodes scanned will be kept in the built-in memory/buffer/cache temporarily.

If you want to upload the data stored in the built-in memory/buffer/cache to your computer or phone, please double-click the scan button when the barcode scanner is in the transmission range.

You may choose whether to erase the barcodes stored in the buffer every time you power on the scanner.

Enable Auto Buffer Storage Clearance	(*) Disable Auto Buffer Storage Clearance

If you want to auto-upload the barcodes that exist in the buffer when the barcode scanner reconnects to the device, you may set the "Auto Upload Barcodes in Buffer" function as enabled.

Enable Auto Upload Barcodes in Buffer	(*) Disable Auto Upload Barcodes in Buffer

Inventory Function

When under inventory mode, barcodes will be saved in the buffer of the barcode scanner and can be uploaded for many times as per your need. You can also erase the barcodes in the buffer after uploading them to your device.

Note: You do not need to scan "Enter Setup" or "Exit with Save" when reading the barcodes below. The functions can be achieved simply by scanning the corresponding function setting barcodes.

||||||||||||||||||||||||||

Exit and Save

||||| |||| ||| ||||| |||| |||||

Enter Setup

Enter Inventory Mode	(*) Return to Common Mode

If you want to erase the data in buffer, scan the "Erase Buffer" barcode

(for inventory mode only)

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Erase Buffer (for inventory mode only)

Scan the "Upload Data" barcode to upload the data in buffer storage

(for inventory mode only)

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Upload Data (for inventory mode only)

Scan the "Upload Number Collected"barcode to upload the number of barcodes collected (for inventory mode only)

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Upload Number Collected (for inventory mode only)

When under inventory mode, if you do not want to scan the same barcode twice, you may set the scanner as "Enable Duplicate Scan Check". After the setting, the scanner will let out a strange "beep" sound when it reads a duplicate barcode, and the duplicate barcode scanned will not be stored in the buffer. The scanner defaults "Disable Duplicate Scan Check". You may enable "duplicate scan check" as per your needs.

||||| |||| ||| ||||| |||| |||||

||||||||||||||||||||

Enter Setup

Enable Duplicate Scan Check	(*) Disable Duplicate Scan Check

Illuminative Light Control

(*) Light up When Scanning

Stay on	Stay off

Navigation Light Control

(*) Light up when Scanning
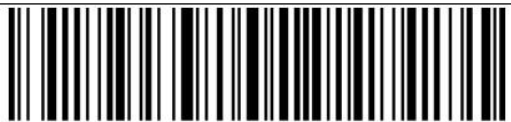
Stay on	Stay off

Navigation Light Flashes
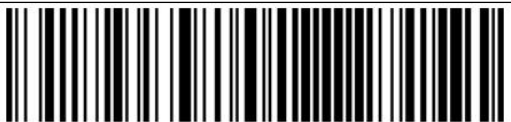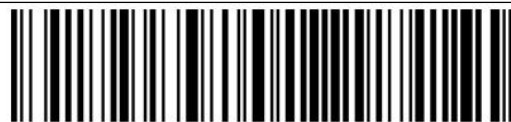
(*) Navigation Light Flashes	Navigation Light Does Not Flash

Enter Setup

Volume Control

Silent	Low Volume
(*) Medium Volume	High Volume

Vibration Alert

Disable Vibration Alert	(*) Enable Slight Vibration Alert
Enable Strong Vibration Alert	

Scanning Mode

Auto Red Light Shut off Mode

Auto red light shut off mode is the default mode. When under this mode, the red light will not become lit unless you press the scan button. If no barcode is scanned, the red light will stay on for some time which can be set as 1s, 2s, 3s, 5s or 50s (2s is the default setting), and then go off. If the barcode is successfully scanned, the red light will go off immediately.

For example: to set the scan mode as "Auto Red Light Shut off" and the shut off time as 1s.

1. Scan the "Enter Setup" barcode.
2. Scan the "Auto Red Light Shut off Mode" barcode.
3. Scan the "Auto Red Light Shut off Time Setting" barcode.

Exit and Save

4. Scan the "1s" barcode.

5. Scan the "Exit and Save" barcode.

(*) Auto Red Light Shut off Mode	Auto Red Light Shut off Time Setting
1s	(*)2s
5s	50s
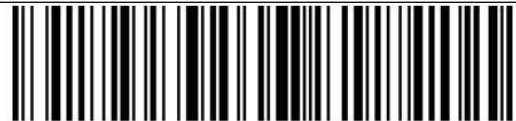
Consecutive Scanning Mode

You don't need to push the button to trigger scanning under this mode. The red LED is on automatically and ready to scan a barcode. If no barcodes are scanned, the red LED will stay on. After a successful scanning, the red LED goes off first and becomes lit again automatically.

To adjust the scanning intervals, please follow the steps below:

For example: to set the scanning mode as "Consecutive Scanning Mode" and set the "Consecutive Scanning Interval" as 1s.

1. Read the "Enter Setup" barcode.

2. Read the "Consecutive Scanning Mode" barcode.

3. Read the "Consecutive Scanning Interval Setting" barcode.

4. Read the "1s" barcode.

5. Read the "Exit and Save" barcode.
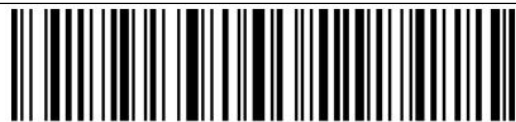
Consecutive Scanning Mode	Consecutive Scanning Interval Setting

||||| ||| ||| || |||| ||||| |||
Enter Setup

||||| ||| |||| |||| ||| ||||| |||
400ms

||||| |||| ||| |||| ||| ||||| |||
800ms

||||| ||| |||| |||| ||||| |||
1s

||||| ||| |||| ||| |||| ||||| |||
(*) 2s

||||| ||| |||| |||| ||| ||||| |||
3s

||||| |||| ||| |||| ||| ||||| |||
5s

||||| ||| |||| |||| ||| ||||| |||
10s

||||| ||| |||| ||| |||| ||||| |||
15s

Manual Scanning Mode

When under the manual scanning mode, a red-light beam will appear when you press the scan button which indicates the scanner is ready to scan barcodes. The red light will not go off until one of the situations below occurs.

1. Read a barcode successfully
2. Release the scan button

||||| ||| |||| ||| |||| ||||| |||
Manual Reading Mode

||||| ||| ||| |||| ||||| |||
Exit and Save

Hands-free Scanning Mode

When under the hands-free scanning mode, the red light won't go off when the scanner reads a barcode successfully. Each barcode will be read only once no matter how long it exposes under the red light.

||||||||||||||||||||

Hands-free Mode

Connection

Wireless Bluetooth Mode

If the BCST-41 has never been paired with any device via Bluetooth, it will enter the pairing mode automatically after powers on. You may use your phone to search the BCST-41 and click to pair. Besides that, you may adjust the scanner to pairing mode by scanning the pairing barcode below.

Once the BCST-41 has been paired to a certain device via the Bluetooth, automatic reconnection will be built when it is powered on the next time.

Note: Normally BCST-41 can re-connect to previously connected device automatically. If it fails, please remove the paring history of BCST-41 in the list of host device. Afterwards, pair them again.

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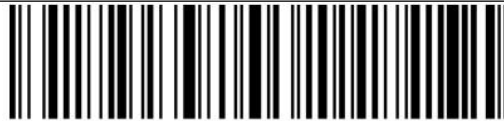
Pairing

When under the Bluetooth HID mode, the phone will hide the virtual keyboard automatically after connected with the BCST-41.

If you are on an iOS device and want to pop out the virtual keyboard when scanning, you may long press the scan button for 3s and for another 3s to hide the virtual keyboard, which is illustrated in the picture below.

If you are on an Android device and want to reactivate the virtual keyboard, please

follow the steps below:

1. Open the "Settings" app on your Android device.

2. Select language and input method, and conduct the steps below according to your Android system version:

Android 7.0 and above: Select "Physical Keyboard"-"Show Virtual Keyboard" in turn.

Android 6.0 and lower: Select "Current Keyboard" - "Hardware (Show Input Method)" in turn.

Set Bluetooth Name

The BCST-41 features Bluetooth name setting with length limited to 32 characters. To change the Bluetooth name, please first make sure the BCST-41 is under Bluetooth HID or GATT mode and then scan the "Enter Setup" - "Set Bluetooth Name" - "Bluetooth Name" (Scan the corresponding character barcodes in the appendix) - "Exit and Save" barcodes.

Note: Please cut the scanner from wireless Bluetooth connection with your phone or computer and delete the pairing history on your phone and computer after modifying the Bluetooth name. Reconnect the scanner with your phone or computer via wireless Bluetooth connection again to reveal the new Bluetooth name.

For example, to change the Bluetooth name to "Tom", you may follow the steps below:

1. Scan the "Enter Setup" barcode.
2. Scan the "Set Bluetooth Name" barcode.
3. Scan the "T" character barcode in the Appendix I.
4. Scan the "o" character barcode in the Appendix I.
5. Scan the "m" character barcode in the Appendix I.
6. Scan the "Exit and Save" barcode.

||| ||| || ||| | || |||| |||| ||| | |||

Set Bluetooth Name

Wired USB Mode

If you have connected the BCST-41 with your computer via the USB cable, the BCST-41 will prioritize using the USB data transmission mode.

||||||| |||| | || ||| | |||||

Exit and Save
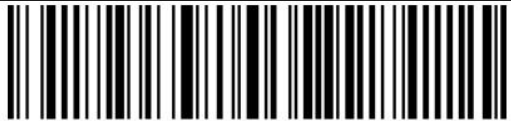
Barcode Settings

Codabar

Enable/Disable Codabar	
(*) Enable Codabar	Disable Codabar
Transmit START/STOP Characters	
(*) Enable Codabar START/STOP Characters	Disable Codabar START/STOP Characters

Code 11

Enable/Disable Code 11	
Enable Code 11	(*) Disable Code 11

Checksum Code

Data in a Code 11 barcode may not include the checksum code. If there is, the checksum code is the last one or two digit(s) of the data output. The checksum code is the value added from all data collected, to check if the data is correct.

After you set the "Code 11 without Checksum" function, the scanner can recognize all Code 11 barcodes normally. The scanner defaults the "Code 11 without Checksum" setting.

After you set the "Code 11 with 1-digit Checksum" function, the scanner will take the last one digit of the data as checksum and won't be able to read Code 11 without checksum or Code 11 with 2-digit checksum.

After you set the "Code 11 with 2-digit Checksum" function, the scanner will take the last two digits of the data as checksum and won't be able to read Code 11 without checksum or Code 11 with 1-digit checksum.

After you set the "Transmit Code 11 Checksum" function, the scanner will take the last 1 or 2 digit(s) of the regular data as the checksum to transmit. The scanner defaults the "Code 11 Transmit Checksum" setting.

Scan the "Do not Transmit Code 11 Checksum" barcode and the scanner won't transmit the checksum.

(*) Code 11 without Checksum	Code 11 with 1-digit Checksum
Code 11 with 2-digit Checksum	(*) Transmit Code 11 Checksum
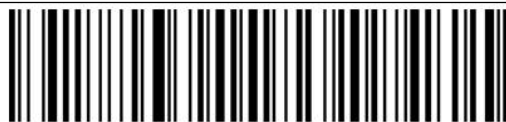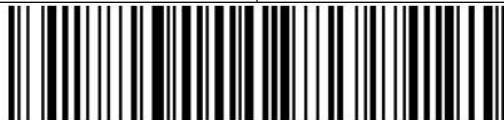
Do not Transmit Code 11 Checksum

Code 128

Enable/Disable Code 128

(*) Enable Code 128	Disable Code 128

GS1-128 (UCC-128/EAN-128)

Enable/Disable GS1-128 (UCC-128/EAN-128)	
Enable GS1-128	(*) Disable GS1-128

USPS and FedEx Barcode

Enable/Disable USPS and FedEx Barcode	
(*) Enable USPS and FedEx Barcode	Disable USPS and FedEx Barcode

Code 39
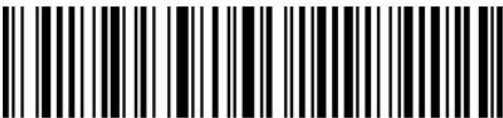
Enable/Disable Code 39	
(*) Enable Code 39	Disable Code 39
Transmit START/STOP Character	
Enable Code 39 START/STOP Character	(*) Disable Code 39 START/STOP Character

Checksum Code

The data in a Code 39 may not contain the checksum code. If there is, the checksum code is the last character of the data. The checksum code is the value added from all data collected, to check if the data is correct.

After you set the "Code 39 without Checksum" function, the scanner will recognize all

Code 39 normally. The scanner defaults enabling "Code 39 without Checksum".
After you set the "Enable and Transmit Code 39 Checksum", the scanner will take the last digit of the Code 39 data output as checksum and transmit it as normal data collected but won't be able to recognize Code 39 without checksum.
After you set the "Enable but Do not Transmit Code 39 Checksum" function, the scanner will take the last digit of the Code 39 output as checksum but won't transmit it. And it won't be able to read Code 39 without checksum.

||||| ||| ||| ||||| ||| |||||||

(*) Code 39 without Checksum

Enable and Transmit Code 39 Checksum	Enable but Do not Transmit Code 39 Checksum

ASCII Code Recognition Range Setting

Enable All Code 39 ACSII Character	Disable All Code 39 ASCII character

VIN (Vehicle Identification Number)

Enable/Disable Code 39 VIN (Vehicle Identification Number)

Enable VIN	(*) Disable VIN

Code 32

Enable/Disable Code 32

Code 32 is a special form of Code 39 that's applied to Italian medical products. The BCST-41 defaults disabling Code 32.

Enable Code 32	(*) Disable Code 32

The fixed initial character of a Code 32 is "A". The BCST-41 supports the function of enabling or disabling the initial character, and defaults disabling it.

Enable Initial Character Output "A"	(*) Disable Initial Character Output "A"

Code 93

Enable/Disable Code 93

(*) Enable Code 93	Disable Code 93

EAN-8

Enable/Disable EAN-8

(*) Enable EAN-8	Disable EAN-8

Checksum Code

(*) Transmit EAN-8 Checksum Code	Do not Transmit EAN-8 Checksum Code

EAN-13

Enable/Disable EAN-13

(*) Enable EAN-13	Disable EAN-13

Checksum Code

(*) Transmit EAN-13 Checksum	Do not Transmit EAN-13 Checksum

ISBN

Convert EAN-13 into ISBN

You may decide whether to convert EAN-13 into ISBN. The scanner won't convert EAN-13 into ISBN by default.

Convert EAN-13 into ISBN	(*) Do not Convert EAN-13 into ISBN

Convert EAN-13 into ISSN

You may decide whether to convert EAN-13 into ISSN. The scanner disables the conversion by default.

Convert EAN-13 into ISSN	(*) Do not Convert EAN-13 into ISSN

MSI

Enable/Disable MSI

Enable MSI	(*) Disable MSI

Checksum Code

The MSI barcode contains 1-digit compulsory checksum code. If there is a checksum code, it will be the last 1 or 2 digit(s). The checksum is the value added from all data collected to check if the data input is correct.

After you set the "MSI without Checksum" function, the scanner can recognize all regular MSI barcodes. The default setting is "MSI without checksum".

After you set the "MSI with One-digit Checksum" function, the scanner will take the last digit of the data as the checksum and won't be able to recognize MSI without checksum or with 2-digit checksum. The default setting is "MSI with One-digit Checksum".

After you set the "MSI with Two-digit Checksum" function, the scanner will take the last two digits of the data as the checksum and won't be able to recognize MSI without checksum or with only 1 digit checksum.

After you set the "Transmit MSI Checksum" function, the scanner will take the last one or two digit(s) of the regular data as the checksum. The default setting is "Transmit MSI Checksum".

After you set the "Do not Transmit MSI Checksum" function, the scanner will no longer transmit MSI checksum.

(*) MSI without Checksum	MSI with One-digit Checksum
MSI with Two-digit Checksum	(*) Transmit MSI Checksum

Do not Transmit MSI Checksum

UPC-A

Enable/Disable UPC-A

(*) Enable UPC-A	Disable UPC-A

UPC-A Outputs 0

You may decide whether to add a character "0" to the output of UPC-A. The scanner defaults disabling the 0 output.

UPC-A Outputs 0	(*) UPC-A Do not Output 0

Checksum Code

You may decide whether to transmit checksum code. The scanner defaults disabling checksum code transmission.

Transmit UPC-A Checksum	(*)Do not Transmit UPC-A Checksum

UPC-A Number System Digit

The first digit of a UPC-A barcode is the number system digit. The scanner default enabling the output of number system digit. You may disable it as per your needs.

(*) UPC-A Outputs Number System Digit	UPC-A Do not Output Number System Digit

UPC-E

Enable/Disable UPC-E

(*) Enable UPC-E	Disable UPC-E

Enable/Disable UPC-E1

The initial digit of most UPC-E is "0". If you want to read UPC-E barcodes with initial digit "1", please first enable the UPC-E and then set the "Enable UPC-E1" barcode. The scanner defaults disabling the UPC-E1.

Enable UPC-E1	(*) Disable UPC-E1

Enable/Disable Initial Digit of UPC-E

(*) Enable Initial Digit of UPC-E

Disable Initial Digit of UPC-E

Convert UPC-E to UPC-A

Convert UPC-E to UPC-A

(*) Do not Convert UPC-E to UPC-A

Checksum Code

(*) Transmit UPC-E Checksum
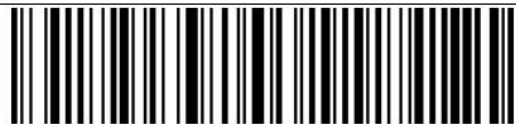
Do not Transmit UPC-E Checksum

IATA 2 of 5

Enable/Disable IATA 2 of 5

Enable IATA 2 of 5

(*) Disable IATA 2 of 5

Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

(*) Enable Interleaved 2 of 5

Disable Interleaved 2 of 5
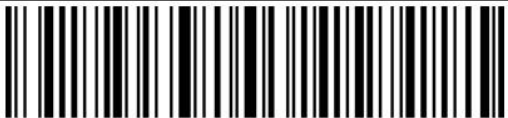
Matrix 2 of 5

Enable/Disable Matrix 2 of 5

Enable Matrix 2 of 5	(*) Disable Matrix 2 of 5

Standard 2 of 5 / Industrial 2 of 5

Enable/Disable Standard 2 of 5 / Industrial 2 of 5

Enable Standard 2 of 5 / Industrial 2 of 5	(*) Disable Standard 2 of 5 / Industrial 2 of 5

GS1 DataBar

GS1 DataBar Limited, GS1 DataBar Expanded, GS1 DataBar Stacked etc. share the same setting barcodes below with GS1 DataBar.

Enable/Disable GS1 DataBar

(*) Enable GS1 DataBar	Disable GS1 DataBar

Enable/Disable GS1 DataBar Composite

(*) Enable GS1 DataBar Composite	Disable GS1 DataBar Composite

To Edit Data Format

Code ID

A Code ID character identifies the code type of a scanned barcode. This is useful when decoding more than one code type.

You may decide whether to add code ID in front of a barcode output. The scanner defaults disabling Code ID.

Output Code ID	(*) Do not Output Code ID

Code ID List

Code Type	Code ID
Code 128	a
EAN-13	b
EAN-8	c
UPC-A	d
UPC-E	e
Code 39	f
Code 93	g
Codabar	h
Interleaved 2 of 5	i
Standard 2 of 5, Industrial 2 of 5	j
Matrix 2 of 5	k
IATA 2 of 5	l
MSI	m
Code 11	n
ISBN	P
ISSN	q
QRCode	A
PDF-417	B

Aztec Code	C
Maxi Code	D
Data Matrix	E
Han Xin Code	F
GS1 128	G
GS1 DataBar, GS1 DataBar Expanded, GS1 DataBar Limited	H

Code End Character Setting

You may decide whether to add a "Enter" after a barcode output. The scanner defaults adding an "Enter" after a barcode.

(*) Add "Enter" after Barcode	Do not Add "Enter" after Barcode

Custom Code Prefix/Suffix Setting

The BCST-41 supports customizing 1-32 digit(s) of barcode prefix, and 1-32 digit(s) of barcode suffix. The prefix and suffix can be either shown or hidden. The scanner defaults showing the prefix and suffix. Please refer to the Appendix for the supported prefix/suffix characters.

Steps to set the prefix as "#" and the suffix as "D" are as below:

1. Read the "Enter Setup" barcode.

2. Read the "Set Prefix" barcode.

3. Read the "#" barcode in Appendix I.

4. Read the "Set Suffix" barcode.

5. Read the "D" barcode in Appendix I.

6. Read the "Exit and Save" barcode.

Note: After you successfully set prefix and suffix, the BCST-41 will by default output scanning result with prefix and suffix.

Set prefix	(*)Show prefix

Exit and Save

(*)Show suffix	Set suffix
Hide prefix	Hide suffix

Delete Characters on Output Result

When outputting scanning result, the BCST-41 supports deleting 0–99 digit(s) front characters and 0–99 digit(s) end characters from a barcode.

Steps to set deleting front 12-digit characters and end 4-digit characters are as below:

1. Read the "Enter Setup" barcode.

2. Read the "Set the Number of Front Digit(s) to be Deleted" barcode.

3. Scan the "1 Digit" barcode.

4. Scan the "2 Digits" barcode.

5. Scan the "Set the Number of End Digit(s) to be Deleted".

6. Scan the "4 Digits" barcode.

7. Scan the "Exit and Save" barcode.

Set Number of Front Digit(s) to be Deleted	Set Number of End Digit(s) to be Deleted
(*) 0 Digit	1 Digit
2 Digits	3 Digits

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4 Digits

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5 Digits

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6 Digits

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7 Digits

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8 Digits

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9 Digits

Upper/Lower Case Setting

The BCST-41 can convert all letters in a barcode into upper case form, or all into lower case form. The case of letters remains unchanged by default. You may change the setting of the upper and lower case by reading the barcodes below.

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Convert All Letters to Upper Case

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Convert All Letters to Lower Case

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(*) Do Not Convert Letter Case

Additional Code

Barcodes like EAN-8, EAN-13, ISBN, ISSN, UPC-A and UPC-E can have additional codes. These additional codes appear on the right of the main code and are shorter than the main code, which can be 2-5 digits. The BCST-41 will only read the main code after you disable the additional code.

2-digit Additional Code

You may decide whether to recognize the 2-digit additional code by set this function

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that is applicable to EAB-8, EAN-13, ISBN, ISSN, UPC-A, and UPC-E. The BCST-41 defaults disabling the recognition of 2-digit additional code.

Enable 2-Digit Additional Code	(*) Disable 2-Digit Additional Code

5-digit Additional Code

You may decide whether to recognize the 5-digit additional code by setting this function which is applicable to EAN-8, EAN-13, ISBN, ISSN, UPC-A and UPC-E. The scanner defaults disabling the recognition of 5-digit additional code.

Enable 5-digit Additional Code	(*) Disable 5-digit Additional Code

Mode of Recognition Only for Barcodes with Additional Code

The scanner can only recognize the barcodes with additional code if you set the mode as "Recognition Only for Barcodes with Additional Code".
The scanner can recognize the barcodes without additional code if you set the mode as "Recognition Not Only for Barcodes with Additional Code".

Recognition Only for Barcodes with Additional Code	(*)Recognition Not Only for Barcodes with Additional Code

Separation Character

You may decide whether to add a separation character "-" between the main code and additional code. This function is applicable to the barcodes with additional code, e.g., ISBN code, and ISSN code.

Add Separation Character	(*) Do not Add Separation Character

Enter Setup

Caps Lock Control

When using the BCST-41 on a Windows system, the content of a barcode may change with the status of the caps lock key. To avoid errors caused by such change, you may enable the "Rid Barcode of Caps Lock Control".

(*) Caps Lock Control Barcode	Rid Barcode of Caps Lock Control

Read Code with Specific Initial Characters Only

Under this mode you may set 1-6 digits as initial characters, and the scanner will only recognize the barcodes with these initial characters. Please refer to the Appendix I for the supported characters.

Steps to enable reading barcodes with initial characters "A" and "6" are as below:

1. Read the "Enter Setup" barcode.

2. Read the "Set the Special Initial Character" barcode.

3. Read the "A" barcode in Appendix I;

4. Read the "6" barcode in Appendix I;

5. Read the "Exit and Save" barcode.

Note: After you set the initial characters by steps above, the BCST-41 will only recognize the barcodes with specific initial characters. If you want to disable the function, please read the "Enter Setup" - "Remove the Restriction on Initial Characters" - "Exit and Save".

Set Initial Characters	Only Read the Barcodes with Specific Initial Characters
(*) Remove the Restriction on Initial Characters	

Exit and Save

Read 1D Inverted Barcode

The inverted barcode refers to the 1D barcode with white lines on black ground (The recognition of different inverted 2D barcodes is set separately.

Recognize Inverted Barcode	(*) Do not Recognize Inverted Barcode

Hide Special Initial Character

Code 128 and Code 39 may contain some special initial characters to indicate some sort of parameter of a product. For example, the character "p" as initial character can indicate "Part Number", and character "Q" can indicate quantity. The BCST-41 can hide such initial characters. If the initial characters are set to be hidden, the initial characters for code 128 and code 39 including D, K, P, Q, S, V, 1P, 1T, 10D, 17V, 2P or 4L will be hidden and won't output. "Hide Special Initial Character" function is disabled by default.

Hide Special Initial Character	(*) Show Special Initial Character

Time Stamp Function

The time stamp includes time (hour/minute/second) and date (day/month/year). The BCST-41 disables time stamp function by default. You may decide whether to output it. You can enable either the time or date, or both time and date output. After you set the time output function, the time stamp will be added to the output of each barcode in the format of 24-hour time system.

Output Time	(*) Do not Output Time

Output Date	(*) Do not Output Date

Due to the time zone difference or the shortage of battery, you may encounter problems such as the time stamp does not synchronize with the local time. You can scan the barcodes below to set the time stamp.

Set the Year of Time Stamp	Set the Month of Time Stamp
Set the Day of Time Stamp	Set the Hour of Time Stamp
Set the Minute of Time Stamp	Set the Second of Time Stamp
Number 0	Number 1
Number 2	Number 3
Number 4	Number 5

Enter Setup

Number 6	Number 7
Number 8	Number 9

For example, if you want to set the time stamp as "09:34:07 2019/04/18", you may follow the steps as indicated below:

1. Read the "Enter Setup" barcode.
2. Read the "Set the Year of Time Stamp" barcode.
3. Read the "Number 1" barcode.
4. Read the "Number 9" barcode.
5. Read the "Set the Month of Time Stamp" barcode.
6. Read the "Number 4" barcode.
7. Read the "Set the Day of Time Stamp" barcode.
8. Read the "Number 1" barcode.
9. Read the "Number 8" barcode.
10. Read the "Set the Hour of Time Stamp" barcode.
11. Read the "Number 9" barcode.
12. Read the "Set the Minute of Time Stamp" barcode.
13. Read the "Number 3" barcode.
14. Read the "Number 4" barcode.
15. Read the "Set the Second of Time Stamp" barcode.
16. Read the "Number 7" barcode.
17. Read the "Exit and Save" barcode.

Note: The year of the time stamp can only be set between 2000 and 2099.

Use of Shortcut Barcodes

There are two types of shortcut barcodes.

Input Type: With these shortcut barcodes you can quickly input some characters. Please refer to Appendix I.

Function Type: These shortcut barcodes work either alone or in combination way.

Exit and Save

Please refer to the Appendix II and Appendix III.

If the shortcut barcode is enabled and you scan some shortcut barcodes of input type, BCST-41 will output corresponding characters. When you scan the shortcut barcodes of function type, BCST-41 will simulate the effect on a keyboard, like a standalone function key or combination ones.

|||||||||||||||||||||||||||| Enable Shortcut Barcodes	|||||||||||||||||||||||||||| (*) Disable Shortcut Barcod es

Settings of Data Coding Format

To let the host print Chinese data in given code format, you may complete the setting by reading the "Data Coding Format" barcode. The scanner defaults outputting data in GBK coding format.

1. Original Data Format, the data coding output format is closely connected with the code generation environment. The output format can be GBK or UNICODE.

2. The GBK (GB2312) is applicable to software like Notepad, Excel, etc.

3. The UNICODE is applicable to software like WORD etc.
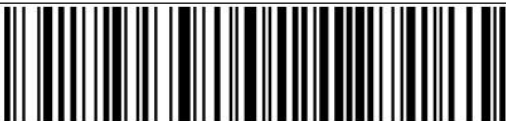
|||||||||||||||||||||||||||| (*) Original Data Coding Format	|||||||||||||||||||||||||||| GBK Data Coding Format
|||||||||||||||||||||||||||| Unicode Data Coding Format	|||||||||||||||||||||||||||| (*) Disable Original and GBK Chinese Character Recognition
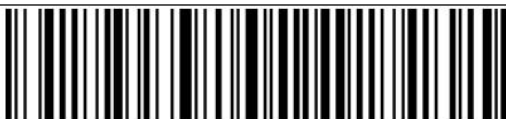
||||||||||||||||||||||||||||

Enable Original and GBK Chinese Character Recognition

Replace GS (^]) with Specific Character

The BCST-41 supports replacing the GS separation character (^]) with specific characters. The scanner defaults disabling the function.

Steps to set replacing GS separation character with character "A" are as below:

1. Read the "Enter Setup" barcode.
2. Read the "Set the GS Replacement Character" barcode.
3. Read the "A" barcode in Appendix I.
4. Read the "Exit and Save" barcode.

Note: After you complete setting the replacement character by following steps above, the BCST-41 will automatically enable the replacing GS with other characters function. If you want to disable the function, please read the "Enter Setup" - "Disable Replacing GS with Other Character" - "Exit and Save" barcodes in turn.

Set the Replacement Character   Enable Replacing GS with Other Characters

(*) Disable Replacing GS with Other Characters

Appendix Ⅰ : Characters

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Appendix Ⅱ : Independent Function Key

Enter Key	Space Key
F1	F2
F3	F4
F5	F6
F7	F8
F9	F10
F11	F12

Tab	Backspace
Delete	Move Cursor Upward
Move Cursor Downward	Move Cursor Leftward
Move Cursor Rightward	Ctrl
Esc	Insert
Home	End
Page Up	Page Down
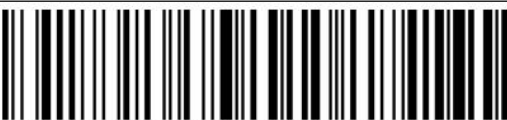
Appendix Ⅲ: Function Key Combinations

NUL(Ctrl+@)	SOH(Ctrl+A)
STX(Ctrl+B)	ETX(Ctrl+C)
EOT(Ctrl+D)	ENQ(Ctrl+E)
ACK(Ctrl+F)	BEL(Ctrl+G)
BS(Ctrl+H)	HT(Ctrl+I)
LF(Ctrl+J)	VT(Ctrl+K)
FF(Ctrl+L)	CR(Ctrl+M)

SO(Ctrl+N)	SI(Ctrl+O)
DLE(Ctrl+P)	DC1(Ctrl+Q)
DC2(Ctrl+R)	DC3(Ctrl+S)
DC4(Ctrl+T)	NAK(Ctrl+U)
SYN(Ctrl+V)	ETB(Ctrl+W)
CAN(Ctrl+X)	EM(Ctrl+Y)
SUB(Ctrl+Z)	ESC(Ctrl+[)

FS(Ctrl+\)	GS(Ctrl+])
RS(Ctrl+^)	US(Ctrl+-)