ZEBEX
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Programming Guide

Advanced 2D Image Scanner

This Programming Guide is intended for:

- **2D Image Engine:** Z-5212

Revision History

Changes to the original manual are listed below:

Version	Date	Description of Version
1.1	2018/03/13	Initial release
1.2	2018/11/1	Descriptions added in brightness and CPU settings

Important Notice

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General Handling Precautions

Do not dispose the scanner in fire.
Do not put the scanner directly in the sun or by any heat source.
Do not use or store the scanner in a very humid place.
Do not drop the scanner or allow it to collide violently with other objects.
Do not take the scanner apart without authorization

Guidance for Printing

This manual is in A5 size. Please double check your printer setting before printing it out. When the barcodes are to be printed out for programming, the use of a high-resolution laser printer is strongly suggested for the best scan result.

Firmware Notice

To use all functions in this guide please update to the latest firmware.

Table of Contents

Using the Scanner

Beeper Indication

Beeps	Indication
1 short beep	A barcode has been successfully decoded
2 short beeps	The scanner has entered program mode
1 long beep	A setting has been programmed
3 beeps in a series from low to high pitch	The scanner has exited program mode
3 short beeps	Error setting the scanner

Settings and Programming

There are two ways to change a parameter value:

1. Scan selected barcodes in this manual.

Decoding options and interface protocols can be tailored to specific applications by scanning programming barcodes in this manual.

Setup parameters are stored in non-volatile memory in the scanner and are retained even when power is off. Setup parameters change only when you reset them. You may need to hide adjacent code patches with your hand when scanning.

Program Set Up Flow:
Scan "Set" to set up --> Scan selected barcode --> Scan "End" to confirm the setup.

2. Send a command from the host system.

Command Packet Format:
The general packet format is as follows:

Length	Command	Type	Beep Code	Data	Checksum

Field Name	Format	Meaning
Length	1 Byte	Length of message not including the check sum bytes. Maximum value is 0xFF.
Command	1 Byte	Identifies the type of packet data sent.
Type	1 Byte	If command is C6h/C7h then this byte represents the parameter number, others indicates On/Off or Enable/Disable.
Beep Code	1 Byte	Whether to make a sound after modifying the parameters. Number that identifies a beep sequence(1~30)
Data	Variable	See individual sections for details.
Checksum	2 Bytes	2's complement sum of message contents excluding checksum.

Command Lists

Name	Type	Command	Description
ILLUMINATION	H	C0h	Turns on/off Illumination pattern.
AIMING	H	C1h	Turns on/off aim pattern.
DECODE_LED	H	C2h	Activates LED output.
BEEP	H	C3h	Sounds the beeper.
SCAN_ENABLE	H	C4h	Permits barcode scanning.
PARAM_SEND	H/D	C6h	Sends parameter values.
PARAM_REQUEST	H	C7h	Requests values of certain parameters.
START_SESSION	H	C8h	Tells decoder to attempt to decode a barcode.
STOP_SESSION	H	C9h	Tells decoder to abort a decode attempt.
REQUEST_INFORMATION	H	CAh	Requests the decoder's information
REPLY_INFORMATION	D	CBh	Replies to REQUEST_INFORMATION
SLEEP	H	CFh	Requests to place the decoder into sleep mode.
CMD_ACK	D	D0h	Positive acknowledgment of received packet.
IMAGE_CAPTURE	H	B1h	Retrieve the last captured image
DECODED_IMAGE	H	B3h	Retrieve the last decoded image

Type: Identifies where the message is coming from.
- H: Host
- D: Decoder

Command: Identifies the type of packet data send

Command Hardware Signals

This communication between the Z-5212 and the Remote Application is base its hardware link:

. TXD:	Transmit Data
. RXD:	Receive Data
. RTS:	Request to Send
. CTS:	Clear to Send

UART Settings

The default parameters are:

. Baud Rate:	115200 Baud
. Data Bits:	8 bits
. Parity:	None
. Stop bits:	1 bit
. Software Handshaking:	Off
. Hardware Handshaking:	Always

User Preferences

Show Version

Scan this barcode to display firmware version.

Read device information

Use command to get firmware version

REQUEST_INFORMATION

Description

Request device information from the decoder.

Packet Format (Host send)

Length	Command	Type	Beep Code	Checksum
04h	CAh	1 byte	00h	2 bytes

Type:

00h: Read all device information
01h: Read device model name
02h: Read device Firmware Version
03h: Read device Kernel Version
04h: Read decoder Version

REPLY_INFORMATION

Description

Replies to REQUEST_INFORMATION command with string.

Packet Format (Decoder send)

Length	Command	type	Beep Code	Data	Checksum
1 bytes	CBh	1 byte	00h	variable	2 bytes

Type:

00h: Data is all device information
01h: Data is Model Name
02h: Data is Firmware Version
03h: Data is Kernel Version
04h: Read decoder Version

Example:

To find the Z-5212 model name, send the following command:
Host Send: 04h CAh 01h 00h FFh 31h
Decoder Send: 0Ah CBh 01h 00h 5Ah 2Dh 35h 32h 31h 32h FDh D9h

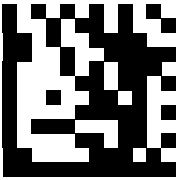
Note: Blue 0Ah denotes 10 characters, green CBh denotes REPLY_INFORMATION, Gray 01h denotes Model Name, the 6 characters in red are ASCII for Z-5212, and the last 2 purple characters are check sum for 2's complement.

To find the Z-5212 firmware version, send the following command:
Host Send: 04h CAh 02h 00h FFh 30h
Decoder Send: 0Ch CBh 02h 00h 46h 57h 31h 38h 30h 36h 30h 38h FDh 53h

Note: Firmware version is FW180608.

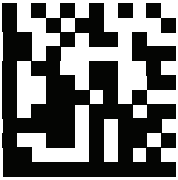
System Settings

Scan this barcode to return all parameters to the default values.



Set

Factory default settings



End

Use command to set factory default

All Default Parameter

Parameter # FDh

Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C6h	FDh	1 byte	2 bytes

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

No NAK returned from decoder.

Use command to get factory default

Parameter # FDh

Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	FDh	00h	FEh 38h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
90h	C6h	FDh	00h	140 bytes	2 bytes

Data:

See 140 bytes Parameter Definitions.

Parameter Scanning (Use barcode settings to enable or disable)
To disable the decoding of parameter barcodes

Parameter # 81h

Set Parameter Scanning

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	81h	1 byte	1 byte	2 bytes

Data:
00h: Disable
01h: Enable (Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Parameter Scanning

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	81h	00h	FEh B4h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	81h	00h	1 byte	2 bytes

Data:
00h: Disable
01h: Enable

Use command to set Illumination

Illumination

Turns on/off illumination LED,
Command # C0h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	C0h	1 bytes	00h	2 bytes

Type:
0: Turn off illumination LED
1: Turn on illumination LED

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to set Aiming

Aiming

Turns on/off aiming pattern,
Command # C1h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	C1h	1 bytes	00h	2 bytes

Type:
0: Turn off aiming pattern
1: Turn on aiming pattern

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to set Decode LED

Decode LED

Turns on/off decode LED

Command # C2h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	C2h	1 bytes	00h	2 bytes

Type:

0: Turn off decode LED

1: Turn on decode LED

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to set Scan Enable

Scan Enable

Permits/Prevents the decoder to scan barcodes.

Command # C4h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	C4h	1 bytes	00h	2 bytes

Type:

0: Prevents the decoder to scan barcodes.

1: Permits the decoder to scan barcodes.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to start scan (for Trigger Mode)

Start Session

Tells decoder to attempt to obtain the requested data.

Command # C8h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	C8h	00h	00h	FFh 34h

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to Stop scan (for Trigger Mode)

Stop Session

Tells decoder to abort a decode attempt transmission.

Command # C9h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	C9h	00h	00h	FFh 33h

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to sound the beep

Beep

Sounds the beeper.

Command # C3h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	C3h	1 byte	00h	2 bytes

Type: See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to set/get Auto Exposure
Select Enable Decoding Autoexposure to allow decoder to control exposure time, decode time and gain.
Select Disable Decoding Autoexposure to manually adjust the exposure time, decode time and gain.

Parameter # A0h

Set Auto Exposure

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A0h	1 byte	1 byte	2 bytes

Data:
00h: Disable Decoding Autoexposure
01h: Enable Decoding Autoexposure(Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Auto Exposure Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	A0h	00h	FEh 95h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Ah	00h	1 byte	2 bytes

Data:
00h: Disable Decoding Autoexposure
01h: Enable Decoding Autoexposure

Use command to set/get Exposure Time
This parameter only applies when Decoding Autoexposure is disabled.

Parameter # A1h

Set Exposure Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	A1h	1 byte	2 byte	2 bytes

Data:
D1: Low byte
D2: High byte

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Exposure Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	A1h	00h	FEh 94h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	A1h	00h	2 byte	2 bytes

Use command to set/get Fixed Gain
This parameter only applies when Decoding Autoexposure is disabled.

Parameter # A2h

Set Fixed Gain

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A2h	1 byte	1 byte	2 bytes

Data:
Gain value: 01h~3Fh

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Fixed Gain

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	A2h	00h	FEh 93h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A2h	00h	1 byte	2 bytes

Use command to set/get Decode Time

Set decode time limit so that the decoder will return when the limit is reached..

Parameter # A3h

Set Decode Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A3h	1 byte	1 byte	2 bytes

Data:

0: No time limit is applied

1~255: a positive integer value in milliseconds(Default 90)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Decode Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	A3h	00h	FEh 92h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A3h	00h	1 byte	2 bytes

Use command to set/get Decode Search Speed
Adjust barcode search time..

Parameter # 49h

Set Decode Search Speed

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	49h	1 byte	1 byte	2 bytes

Data:

0: Can find low contrast barcode

1: faster but less damage tolerant, can find low contrast barcode

2: faster than above, even less damage tolerant, Can find medium contrast barcode

3: faster than above, same damage tolerant, find high contrast barcode only (Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Decode Search Speed

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	49h	00h	FEh ECh

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	49h	00h	1 byte	2 bytes

Use command to set/get Low Contrast
This parameter Enable/disable low contrast image of common 1D barcodes: Code 128, Code 39, UPC/EAN/JAN, I 2of 5, Codabar, Code 93. With the low contrast mode enabled, a light on dark (i.e. inverse image) barcode can also be decoded.

Parameter # 4Dh

Set Low Contrast

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	4Dh	1 byte	1 byte	2 bytes

Data:
0: disable decoding of low contrast barcodes(Default)
1: enable decoding of low contrast barcodes

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Low Contrast

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	4Dh	00h	FEh E8h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	4Dh	00h	1 byte	2 bytes

Use command to set/get Security Level
This parameter set decoding security level to reduce misdecoding of 1D barcodes when printing quality is poor or when the 1D barcode module resolution is marginal. Use the following to set the security level for these 1D barcodes: Code 128, Code 39, UPC/EAN/JAN, I 2of 5, Codabar, and Code 93.

Parameter # 4Eh

Set Security Level

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	4Eh	1 byte	1 byte	2 bytes

Data:

0: Default, most aggressive decoding

1: reduced aggressiveness to avoid misdecoding poorly printed 1D barcodes

2: lowest aggressiveness to avoid misdecoding poorly printed 1D barcodes

3: apply low pass filter to reduce image noise

4: reduced aggressiveness to avoid misdecoding 1D barcodes with poor resolution (module is small)

5: lowest aggressiveness to avoid misdecoding 1D barcodes with poor resolution (module is small)

6: attempt to correct and decode poorly printed characters currently applicable to Code 128 only

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Security Level

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum

04h	C7h	4Eh	00h	FEh E7h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	4Eh	00h	1 byte	2 bytes

Use command to set/get Motion Detect Sensibility(for Auto Scan Mode)
In Auto Scan Mode, this parameter is to set the motion detection sensibility.

Parameter # 82h

Set Motion Detect Sensibility

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	82h	1 byte	1 byte	2 bytes

Data:
0~7: 0 is the highest sensitivity, 7is the lowest sensibility. (Default 2)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Motion Detect Sensibility

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	82h	00h	FEh B3h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	82h	00h	1 byte	2 bytes

Use command to set/get Low Light Motion Detection(for Auto Scan Mode)
In Auto Scan Mode, this parameter allows motion detection in bright to dark illumination environments..

Parameter # 83h

Set Low Light Motion Detection

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	83h	1 byte	1 byte	2 bytes

Data:

0~7: 0 is good brightness, 7 is low brightness (Default 3).

Note: for dark surroundings, use illumination on Page 58 to change the setting to Always On.

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Set Low Light Motion Detection

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	83h	00h	FEh B2h

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	83h	00h	1 byte	2 bytes

Use command to set/get Frame Rate (for Trigger Mode)
Select an option to control the rate at which frames are captured. When capturing images using lower frame rates can improve image brightness.

Parameter # 87h

Set Frame Rate

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	87h	1 byte	1 byte	2 bytes

Data:
0: 20 fps - The frame rate is fixed at 20 frames per second
1: 30 fps (Default)
2: 40 fps - The frame rate is fixed at 40 frames per second
3: 50 fps - The frame rate is fixed at 50 frames per second
4: 60 fps - The frame rate is fixed at 60 frames per second

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Frame Rate

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	87h	00h	FEh AEh

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	87h	00h	1 byte	2 bytes

Use command to set/get CPU frequency
Change CPU frequency

Parameter # 71h

Set CPU frequency

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	71h	1 byte	1 byte	2 bytes

Data:
0: Max frequency (Default)
1: Medium frequency
2: Minimum frequency

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read CPU frequency

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	71h	00h	2 bytes

Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	71h	00h	1 byte	2 bytes

Use command to set/get Power Mode(Trigger Mode Only)
Select whether or not the decoder enters Low Power mode after a decode attempt. In Continuous On mode, the decoder does not enter this low power state.

Parameter # 70h

Set Power Mode

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	70h	1 byte	1 byte	2 bytes

Data:
00h: Continuous On
01h: Low Power Mode (Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Power Mode

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	70h	00h	FEh C5h

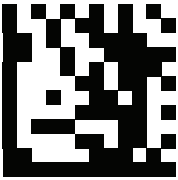
Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	70h	00h	1 byte	2 bytes

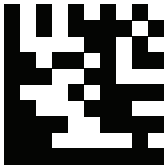
Scan Mode

Scan a barcodes below to set the scanner to different modes.

Trigger Mode: The scanner becomes inactive as soon as the data is transmitted by pressing the trigger button.
Auto Scan Mode: The scanner is still active after the data is transmitted but the successive transmission of the same code is not allowed.

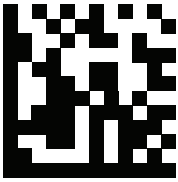


Set



Trigger Mode (Default)

Auto Scan Mode



End

Use command to set/get Scan Mode

Parameter # 8Ah

Set Scan Mode

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Ah	1 byte	1 byte	2 bytes

Data:
00h: Trigger Mode(default)
08h: Auto Scan Mode

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Scan Mode

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	8Ah	00h	FEh ABh

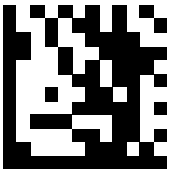
Receive:

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Ah	00h	1 byte	2 bytes

Data:
00h: Trigger Mode
08h: Auto Scan Mode

Standby Time for Auto Scan Mode Mode

Use the barcodes below to set the standby time for Auto Scan Mode.

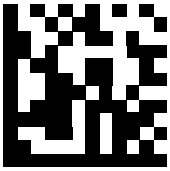


Set

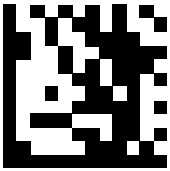
5 minutes (Default)

10 minutes

15 minutes



End

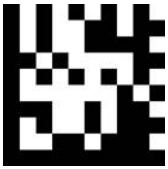


Set

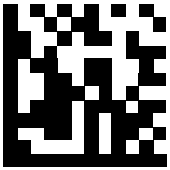
20 minutes

25 minutes

30 minutes



Never



End

Use command to set/get Standby Time

Parameter # 8Dh

Set Standby Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Dh	1 byte	1 byte	2 bytes

Data:

00h: Never
05h: 5 minutes (Default)
0Ah: 10 minutes
0Fh: 15 minutes
14h: 20 minutes
19h: 25 minutes
1Eh: 30 minutes

Beep Code:

0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Standby Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	8Dh	00h	FEh A8h

Receive: (Decoder send)

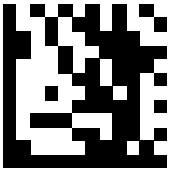
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Dh	00h	1 byte	2 bytes

Data:

00h: Never
05h: 5 minutes
0Ah: 10 minutes
0Fh: 15 minutes
14h: 20 minutes
19h: 25 minutes
1Eh: 30 minutes

Same Code Delay Time for Auto Scan Mode

Scan a barcode below to select the duration of the delay time for Auto Scan Mode.

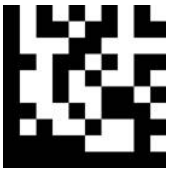


Set

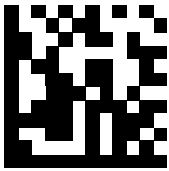
500 msec (Default)

1 sec

1.5 sec



2 sec



End

Use command to set/get Same Code Delay Time

Parameter # 8Eh

Set Same Code Delay Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Eh	1 byte	1 byte	2 bytes

Data:
- 00h: 0.5 Sec (Default)
- 01h: 1 Sec
- 02h: 1.5 Sec
- 03h: 2 Sec

Beep Code:
- 0: Silent after completion
- 1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Same Code Delay Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	8Eh	00h	FEh A7h

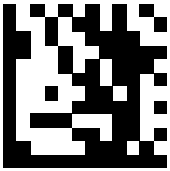
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Eh	00h	1 byte	2 bytes

Data:
- 00h: 0.5 Sec
- 01h: 1 Sec
- 02h: 1.5 Sec
- 03h: 2 Sec

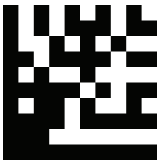
Blink Mode for Auto Scan Mode

The light beam would automatically start blinking after the scanner has been inactive for a period of time. Scan a barcode below to set the time for switching to blink mode when the scanner is idle.

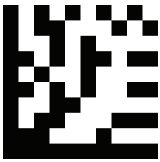


Set

Off (Default)

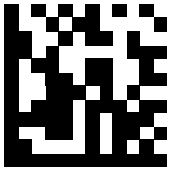


1 sec

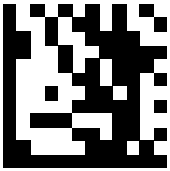


5 sec

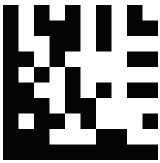
10 sec



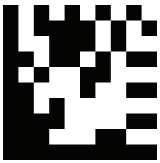
End



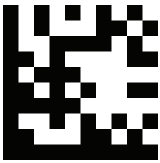
Set



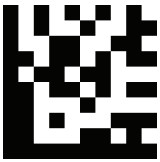
15 sec



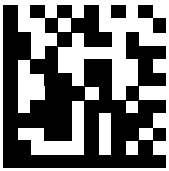
20 sec



30 sec



60 sec



End

Use command to set/get Blink Mode Time

Parameter # 8Ch

Set Blink Mode Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Ch	1 byte	1 byte	2 bytes

Data:

00h: Off (Default)
01h: 1 Sec
05h: 5 Sec
0Ah: 10 Sec
0Fh: 15 Sec
14h: 20 Sec
1Eh: 30 Sec
3Ch: 60 Sec

Beep Code:

0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Same Code Delay Time

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	8Ch	00h	FEh A9h

Receive: (Decoder send)

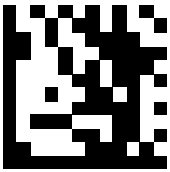
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	8Ch	00h	1 byte	2 bytes

Data:

00h: Off
01h: 1 Sec
05h: 5 Sec
0Ah: 10 Sec
0Fh: 15 Sec
14h: 20 Sec
1Eh: 30 Sec
3Ch: 60 Sec

Power-up Beeps On/ Off

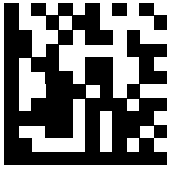
Scan a barcode below to turn on/off power-up beeps.



Set

On

Off



End

Use command to set/get Power-up Beeps on/off

Parameter # ABh

Set Power-up Beeps on/off

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	ABh	1 byte	1 byte	2 bytes

Data:
00h: Off
01h: On (Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Power-up Beeps

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	ABh	00h	FEh 8Ah

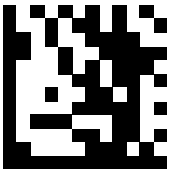
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	ABh	00h	1 byte	2 bytes

Data:
00h: Off
01h: On

Good Read Beep On/ Off

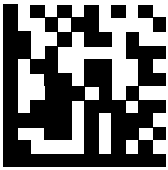
Scan a barcode below to turn on/off good read beep.



Set

On (Default)

Off



End

Use command to set/get Good Read Beep on/off

Parameter # AAh

Set Good Read Beep on/off

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	AAh	1 byte	1 byte	2 bytes

Data:
00h: Off
01h: On (Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Good Read Beep on/off

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	AAh	00h	FEh 8Bh

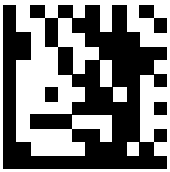
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	AACh	00h	1 byte	2 bytes

Data:
00h: Off
01h: On

Good Read Beep Length

Scan a barcode below to select the duration of the beep signal after a good decode.



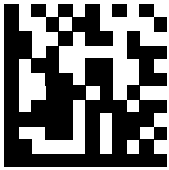
Set

50 msec (Default)

100 msec

150 msec

200 msec



End

Use command to set/get Good Read Beep Length

Parameter # ADh

Set Good Read Beep Length

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	ADh	1 byte	1 byte	2 bytes

Data:

00h: 50 ms (Default)
01h: 100 ms
02h: 150 ms
03h: 200 ms

Beep Code:

0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Good Read Beep Length

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	ADh	00h	FEh 88h

Receive: (Decoder send)

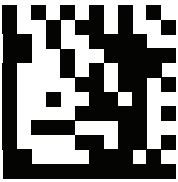
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	ADh	00h	1 byte	2 bytes

Data:

00h: 50 ms
01h: 100 ms
02h: 150 ms
03h: 200 ms

Good Read Beep Frequency

Scan a barcode below to select the beep tone of the beep signal after a good decode.

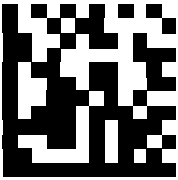


Set

Low

Medium (Default)

High



End

Use command to set/get Good Read Beep Frequency

Parameter # ACh

Set Good Read Beep Frequency

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	ACh	1 byte	1 byte	2 bytes

Data:
- 00h: High Frequency
- 01h: Medium Frequency (Default)
- 02h: Low Frequency

Beep Code:
- 0: Silent after completion
- 1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Good Read Beep Frequency

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	ACh	00h	FEh 89h

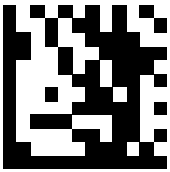
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	ACh	00h	1 byte	2 bytes

Data:
- 00h: High Frequency
- 01h: Medium Frequency (Default)
- 02h: Low Frequency

Good Read LED On/ Off

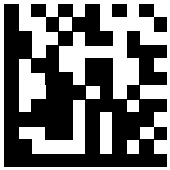
Scan a barcode below to turn on/off good read LED.



Set

On (Default)

Off



End

Use command to set/get Good Read LED on/off

Parameter # A5h

Set Good Read LED On/Off

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A5h	1 byte	1 byte	2 bytes

Data:
00h: Off
01h: On (Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Good Read LED On/Off

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	A5h	00h	FEh 90h

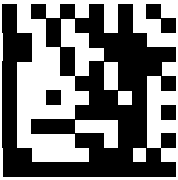
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A5h	00h	1 byte	2 bytes

Data:
00h: Off
01h: On (Default)

Aiming Pattern

Aiming pattern works as an aiming system to aid in barcode reading. Use the following settings to enable or disable this function. This function is for supporting models only.

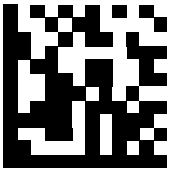


Set

Auto (Default)

Always On

Always Off



End

Use command to set/get Aiming Pattern

Parameter # A7h

Set Aiming Pattern

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A7h	1 byte	1 byte	2 bytes

Data:
- 00h: Auto (Default)
- 01h: Always On
- 02h: Always Off

Beep Code:
- 0: Silent after completion
- 1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Aiming Pattern

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	A7h	00h	FEh 8Eh

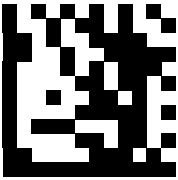
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A7h	00h	1 byte	2 bytes

Data:
- 00h: Auto
- 01h: Always On
- 02h: Always Off

Illumination

Set Illumination to aid in barcode reading. Use the following settings to configure this function.

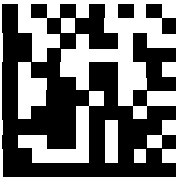


Set

On (Default)

Always On

Off



End

Notes:

- Not all models can support this function.

Use command to set/get Illumination

Parameter # A6h

Set Illumination

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A6h	1 byte	1 byte	2 bytes

Data:
00h: Auto (Default)
01h: Always On
02h: Always Off

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Illumination

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	A6h	00h	FEh 8Fh

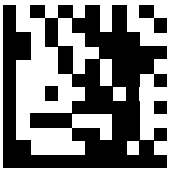
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	A6h	00h	1 byte	2 bytes

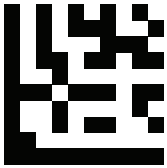
Data:
00h: Auto
01h: Always On
02h: Always Off

RS232 Baud Rate

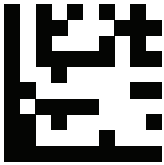
Baud rate is the number of bits of data transmitted per second. Set the imager's baud rate to match the baud rate setting of the host device. Otherwise, data may not reach the host device or may reach it in distorted form.



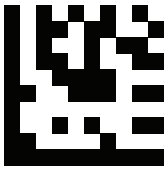
Set



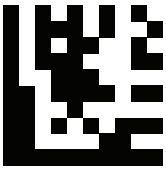
9600



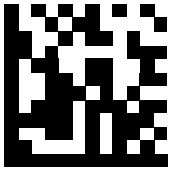
19200



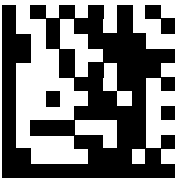
38400



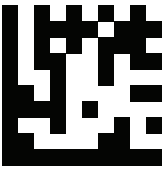
57600



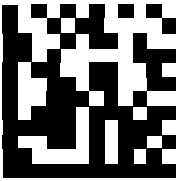
End



Set



115200 (Default)



End

Use command to set/get RS232 Baud Rate

Parameter # 9Ch

Set RS232 Baud Rate

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Ch	1 byte	1 byte	2 bytes

Data:

00h: 9600
01h: 19200
02h: 38400
03h: 57600
04h: 115200 (Default)
05h: 230400

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read RS232 Baud Rate

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	9Ch	00h	FEh 99h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Ch	00h	1 byte	2 bytes

Data:
00h: 9600
01h: 19200
02h: 38400
03h: 57600
04h: 115200
05h: 230400

RS232 Parity Type

Use command to set/get RS232 Parity Type

Parameter # 9Eh

Set RS232 Parity Type

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Eh	1 byte	1 byte	2 bytes

Data:
- 00h: Non(Default)
- 01h: Odd
- 02h: Even

Beep Code:
- 0: Silent after completion
- 1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read RS232 Parity Type

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	9Eh	00h	FEh 97h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Eh	00h	1 byte	2 bytes

Data:
- 00h: None
- 01h: Odd
- 02h: Even

RS232 Stop Bits

Use command to set/get RS232 Stop Bits

Parameter # 9Dh

Set RS232 Stop Bits

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Dh	1 byte	1 byte	2 bytes

Data:
01h: 1 Stop Bit(Default)
02h: 2 Stop Bits

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read RS232 Stop Bits

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	9Dh	00h	FEh 98h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Dh	00h	1 byte	2 bytes

Data:
01h: 1 Stop Bit
02h: 2 Stop Bits

Software Handshaking

Use command to set/get Software Handshaking

Parameter # 9Fh

Set Software Handshaking

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Fh	1 byte	1 byte	2 bytes

Data:
00h: Disable (Default)
01h: Enable

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Software Handshaking

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	9Fh	00h	FEh 96h

Receive: (Decoder send)

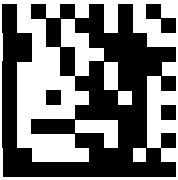
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	9Fh	00h	1 byte	2 bytes

Data:
00h: Disable
01h: Enable

Readable Symbologies

This section provides the programming barcodes for enabling and disabling readable symbologies. If the default values suit requirements, programming is not necessary.

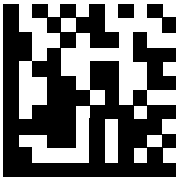
All Symbologies



Set

Enable All

Default



End

Use command to set Readable to default

Parameter # 00h

Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C6h	00h	1 byte	2 bytes

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Use command to read the default value of Readable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	00h	00h	FFh 35h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
22h	C6h	00h	00h	30 byte	2 bytes

Data: 30 bytes Readable Code (Please see Readable Code Lists)
0: Disable
1: Enable

Use command to read the Readable setting

Parameter # FCh

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	FCh	00h	FEh 39h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
22h	C6h	FCh	00h	30 byte	2 bytes

Data: 30 bytes Readable Code (Please see Readable Code Lists)
0: Disable
1: Enable

Use command to set the Readable

Parameter # FCh

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
22h	C6h	FCh	00h	30 byte	2 bytes

Data: 30 bytes Readable Code(Please see Readable Code Lists)
0: Disable
1: Enable

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

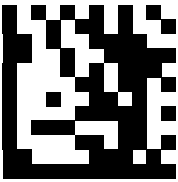
Readable Code Lists

byte	Readable Code	byte	Readable Code	byte	Readable Code
1	UPC-A	11	Plessey	21	Component CC-A
2	UPC-E	12	MSI	22	Component CC-B
3	EAN-8	13	Interleaved 2 of 5	23	Component CC-C
4	EAN-13	14	IATA 2 of 5	24	PDF 417
5	Code 128	15	Matrix 2 of 5	25	Micro PDF 417
6	Code 39	16	Straight 2 of 5	26	Data Matrix
7	Code 93	17	Pharmacode	27	QR
8	Code 32	18	RSS 14	28	Micro QR
9	Code 11	19	RSS Expanded	29	Aztec
10	Codabar	20	RSS Limited	30	Maxicode

Readable Codes Default Value:

UPC-A	Enable	Straight 2 of 5	Disable
UPC-E	Disable	Pharmacode	Disable
EAN-8	Enable	RSS 14	Enable
EAN-13	Enable	RSS Expanded	Enable
Code 128	Enable	RSS Limited	Enable
Code 39	Enable	Component CC-A	Disable
Code 93	Enable	Component CC-B	Disable
Code 32	Disable	Component CC-C	Disable
Code 11	Disable	PDF 417	Enable
Codabar	Enable	Micro PDF 417	Enable
Plessey	Disable	Data Matrix	Enable
MSI	Disable	QR Code	Enable
Interleaved 2 of 5	Enable	Micro QR	Enable
IATA 2 of 5	Disable	Aztec	Disable
Matrix 2 of 5	Disable	Maxicode	Disable

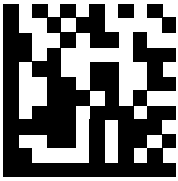
UPC-A



Set

Enable UPC-A (Default)

Disable UPC-A



End

Use command to set/get UPC-A

Parameter # 01h

Set UPC-A Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	01h	1 byte	1 byte	2 bytes

Data:

00h: Disable UPC-A

01h: Enable UPC-A(Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read UPC-A Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	01h	00h	FFh 34h

Receive: (Decoder send)

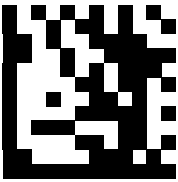
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	01h	00h	1 byte	2 bytes

Data:

00h: UPC-A Disable

01h: UPC-A Enable

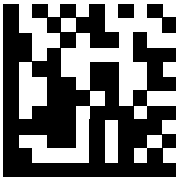
UPC-E



Set

Enable UPC-E

Disable UPC-E (Default)



End

Use command to set/get UPC-E

Parameter # 02h

Set UPC-E Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	02h	1 byte	1 byte	2 bytes

Data:
00h: Disable UPC-E(Default)
01h: Enable UPC-E

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read UPC-E Setting

Send Packet Format (Host send)

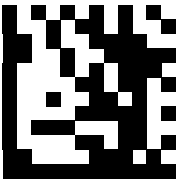
Length	Command	Parameter	Beep Code	Check sum
04h	C7h	02h	00h	FFh 33h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	02h	00h	1 byte	2 bytes

Data:
00h: UPC-E Disable
01h: UPC-E Enable

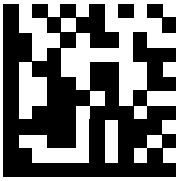
EAN-8



Set

Enable EAN 8 (Default)

Disable EAN 8



End

Use command to set/get EAN-8

Parameter # 03h

Set EAN-8 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	03h	1 byte	1 byte	2 bytes

Data:

00h: Disable EAN-8

01h: Enable EAN-8(Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read EAN-8 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	03h	00h	FFh 32h

Receive: (Decoder send)

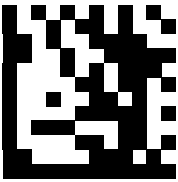
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	03h	00h	1 byte	2 bytes

Data:

00h: EAN-8 Disable

01h: EAN-8 Enable

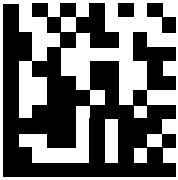
EAN 13



Set

Enable EAN 13 (Default)

Disable EAN 13



End

Use command to set/get EAN-13

Parameter # 04h

Set EAN-13 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	04h	1 byte	1 byte	2 bytes

Data:

00h: Disable EAN-13

01h: Enable EAN-13(Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read EAN-13 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	04h	00h	FFh 31h

Receive: (Decoder send)

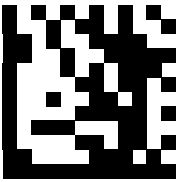
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	04h	00h	1 byte	2 bytes

Data:

00h: EAN-13 Disable

01h: EAN-13 Enable

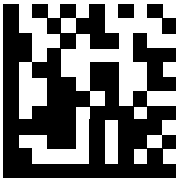
Code 128



Set

Enable Code 128 (Default)

Disable Code 128



End

Use command to set/get Code 128

Parameter # 05h

Set Code 128 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	05h	1 byte	1 byte	2 bytes

Data:
00h: Disable Code 128
01h: Enable Code 128(Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code 128 Setting

Send Packet Format (Host send)

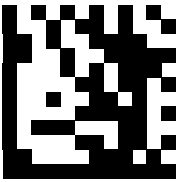
Length	Command	Parameter	Beep Code	Check sum
04h	C7h	05h	00h	FFh 30h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	05h	00h	1 byte	2 bytes

Data:
00h: Code 128 Disable
01h: Code 128 Enable

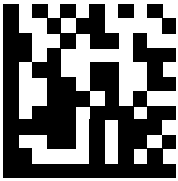
Code 39



Set

Enable Code 39 (Default)

Disable Code 39



End

Use command to set/get Code 39

Parameter # 06h

Set Code 39 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	06h	1 byte	1 byte	2 bytes

Data:

00h: Disable Code 39

01h: Enable Code 39(Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code 39 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	06h	00h	FFh 2Fh

Receive: (Decoder send)

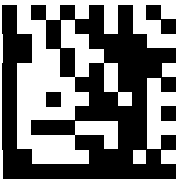
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	06h	00h	1 byte	2 bytes

Data:

00h: Code 39 Disable

01h: Code 39 Enable

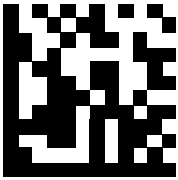
Code 93



Set

Enable Code 93 (Default)

Disable Code 93



End

Use command to set/get Code 93

Parameter # 07h

Set Code 93 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	07h	1 byte	1 byte	2 bytes

Data:

00h: Disable Code 93

01h: Enable Code 93(Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code 93 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	07h	00h	FFh 2Eh

Receive: (Decoder send)

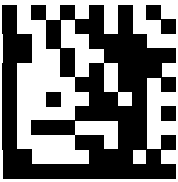
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	07h	00h	1 byte	2 bytes

Data:

00h: Code 93 Disable

01h: Code 93 Enable

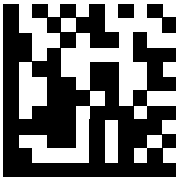
Code 32



Set

Enable Code 32

Disable Code 32 (Default)



End

Use command to set/get Code 32

Parameter # 08h

Set Code 32 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	08h	1 byte	1 byte	2 bytes

Data:

00h: Disable Code 32(Default)

01h: Enable Code 32

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code 32 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	08h	00h	FFh 2Dh

Receive: (Decoder send)

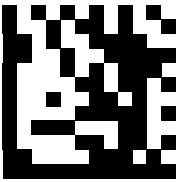
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	08h	00h	1 byte	2 bytes

Data:

00h: Code 32 Disable

01h: Code 32 Enable

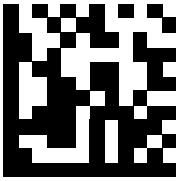
Code 11



Set

Enable Code 11

Disable Code 11 (Default)



End

Use command to set/get Code 11

Parameter # 09h

Set Code 11 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	09h	1 byte	1 byte	2 bytes

Data:

00h: Disable Code 11(Default)

01h: Enable Code 11

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code 11 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	09h	00h	FFh 2Ch

Receive: (Decoder send)

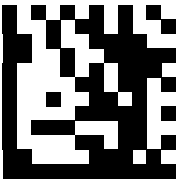
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	09h	00h	1 byte	2 bytes

Data:

00h: Code 11 Disable

01h: Code 11 Enable

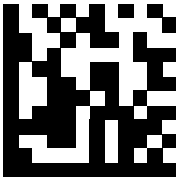
Codabar



Set

Enable Codabar (Default)

Disable Codabar



End

Use command to set/get Codabar

Parameter # 0Ah

Set Codabar Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Ah	1 byte	1 byte	2 bytes

Data:

00h: Disable Codabar

01h: Enable Codabar (Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Codabar Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	0Ah	00h	FFh 2Bh

Receive: (Decoder send)

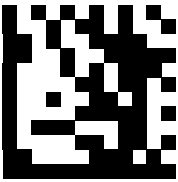
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Ah	00h	1 byte	2 bytes

Data:

00h: Codabar Disable

01h: Codabar Enable

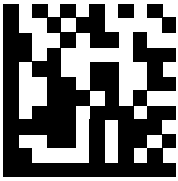
Plessey



Set

Enable Plessey

Disable Plessey (Default)



End

Use command to set/get Plessey

Parameter # 0Bh

Set Plessey Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Bh	1 byte	1 byte	2 bytes

Data:

00h: Disable Plessey(Default)

01h: Enable Plessey

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Plessey Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	0Bh	00h	FFh 2Ah

Receive: (Decoder send)

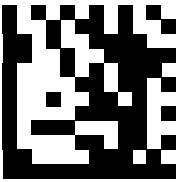
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Bh	00h	1 byte	2 bytes

Data:

00h: Plessey Disable

01h: Plessey Enable

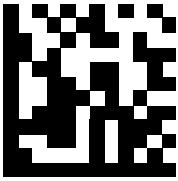
MSI/Plessy



Set

Enable MSI/Plessy

Disable MSI/Plessy (Default)



End

Use command to set/get MSI

Parameter # 0Ch

Set MSI Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Ch	1 byte	1 byte	2 bytes

Data:

00h: Disable MSI (Default)

01h: Enable MSI

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read MSI Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	0Ch	00h	FFh 29h

Receive: (Decoder send)

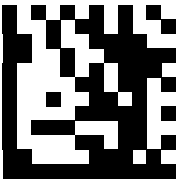
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Ch	00h	1 byte	2 bytes

Data:

00h: MSI Disable

01h: MSI Enable

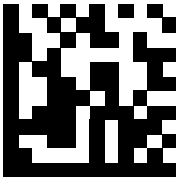
Interleaved 2 of 5



Set

Enable Interleaved 2 of 5 (Default)

Disable Interleaved 2 of 5



End

Use command to set/get Interleaved 2 of 5

Parameter # 0Dh

Set Interleaved 2 of 5Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Dh	1 byte	1 byte	2 bytes

Data:

00h: Disable Interleaved 2 of 5

01h: Enable Interleaved 2 of 5(Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Interleaved 2 of 5 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	0Dh	00h	FFh 28h

Receive: (Decoder send)

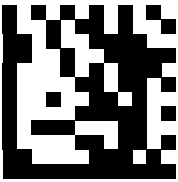
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Dh	00h	1 byte	2 bytes

Data:

00h: Interleaved 2 of 5 Disable

01h: Interleaved 2 of 5 Enable

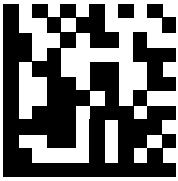
IATA 2 of 5



Set

Enable IATA 2 of 5

Disable IATA 2 of 5 (Default)



End

Use command to set/get IATA 2 of 5

Parameter # 0Eh

Set IATA 2 of 5 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Eh	1 byte	1 byte	2 bytes

Data:

00h: Disable IATA 2 of 5 (Default)

01h: Enable IATA 2 of 5

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read IATA 2 of 5 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	0Eh	00h	FFh 27h

Receive: (Decoder send)

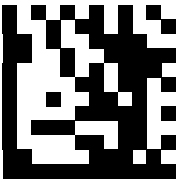
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Eh	00h	1 byte	2 bytes

Data:

00h: IATA 2 of 5 Disable

01h: IATA 2 of 5 Enable

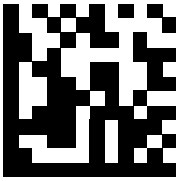
Matrix 2 of 5



Set

Enable Matrix 2 of 5

Disable Matrix 2 of 5 (Default)



End

Use command to set/get Matrix 2 of 5

Parameter # 0Fh

Set Matrix 2 of 5 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Fh	1 byte	1 byte	2 bytes

Data:

00h: Disable Matrix 2 of 5(Default)

01h: Enable Matrix 2 of 5

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Matrix 2 of 5 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	0Fh	00h	FFh 26h

Receive: (Decoder send)

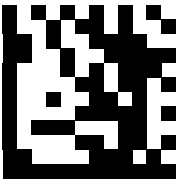
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	0Fh	00h	1 byte	2 bytes

Data:

00h: Matrix 2 of 5 Disable

01h: Matrix 2 of 5 Enable

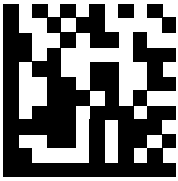
Straight 2 of 5



Set

Enable Straight 2 of 5

Disable Straight 2 of 5 (Default)



End

Use command to set/get Straight 2 of 5

Parameter # 10h

Set Straight 2 of 5 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	10h	1 byte	1 byte	2 bytes

Data:

00h: Disable Straight 2 of 5(Default)

01h: Enable Straight 2 of 5

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Straight 2 of 5 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	10h	00h	FFh 25h

Receive: (Decoder send)

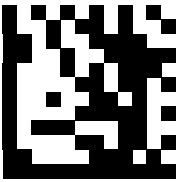
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	10h	00h	1 byte	2 bytes

Data:

00h: Straight 2 of 5 Disable

01h: Straight 2 of 5 Enable

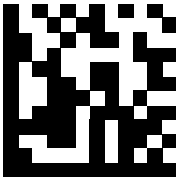
RSS 14



Set

Enable RSS 14 (Default)

Disable RSS 14



End

Use command to set/get RSS 14

Parameter # 12h

Set RSS 14 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	12h	1 byte	1 byte	2 bytes

Data:

00h: Disable RSS 14

01h: Enable RSS 14(Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read RSS 14 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	12h	00h	FFh 23h

Receive: (Decoder send)

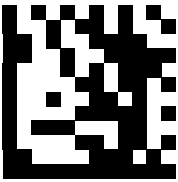
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	12h	00h	1 byte	2 bytes

Data:

00h: RSS 14 Disable

01h: RSS 14 Enable

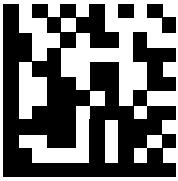
RSS Expanded



Set

Enable RSS Expanded (Default)

Disable RSS Expanded



End

Use command to set/get RSS Expanded

Parameter # 13h

Set RSS Expanded Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	13h	1 byte	1 byte	2 bytes

Data:

00h: Disable RSS Expanded

01h: Enable RSS Expanded (Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read RSS Expanded Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	13h	00h	FFh 22h

Receive: (Decoder send)

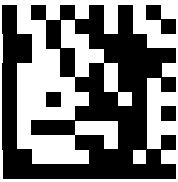
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	13h	00h	1 byte	2 bytes

Data:

00h: RSS Expanded Disable

01h: RSS Expanded Enable

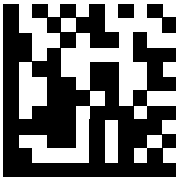
RSS Limited



Set

Enable RSS Limited (Default)

Disable RSS Limited



End

Use command to set/get RSS Limited

Parameter # 14h

Set RSS Expanded Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	14h	1 byte	1 byte	2 bytes

Data:

00h: Disable RSS Limited

01h: Enable RSS Limited (Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read RSS Limited Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	14h	00h	FFh 21h

Receive: (Decoder send)

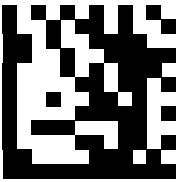
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	14h	00h	1 byte	2 bytes

Data:

00h: RSS Limited Disable

01h: RSS Limited Enable

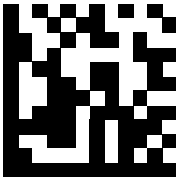
Component CC-A



Set

Enable Component CC-A

Disable Component CC-A (Default)



End

Use command to set/get Component CC-A

Parameter # 15h

Set Component CC-A Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	15h	1 byte	1 byte	2 bytes

Data:

00h: Disable Component CC-A (Default)

01h: Enable Component CC-A

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Component CC-A Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	15h	00h	FFh 20h

Receive: (Decoder send)

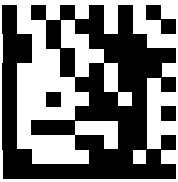
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	15h	00h	1 byte	2 bytes

Data:

00h: Component CC-A Disable

01h: Component CC-A Enable

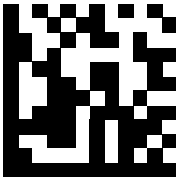
Component CC-B



Set

Enable Component CC-B

Disable Component CC-B (Default)



End

Use command to set/get Component CC-B

Parameter # 16h

Set Component CC-B Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	16h	1 byte	1 byte	2 bytes

Data:

00h: Disable Component CC-B (Default)

01h: Enable Component CC-B

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Component CC-B Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	16h	00h	FFh 1Fh

Receive: (Decoder send)

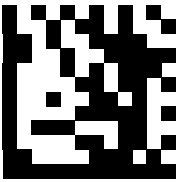
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	16h	00h	1 byte	2 bytes

Data:

00h: Component CC-B Disable

01h: Component CC-B Enable

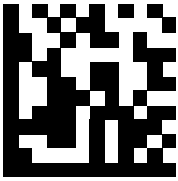
Component CC-C



Set

Enable Component CC-C

Disable Component CC-C (Default)



End

Use command to set/get Component CC-C

Parameter # 17h

Set Component CC-C Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	17h	1 byte	1 byte	2 bytes

Data:

00h: Disable Component CC-C (Default)

01h: Enable Component CC-C

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Component CC-C Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	17h	00h	FFh 1Eh

Receive: (Decoder send)

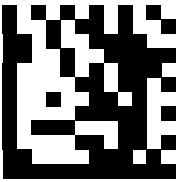
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	17h	00h	1 byte	2 bytes

Data:

00h: Component CC-C Disable

01h: Component CC-C Enable

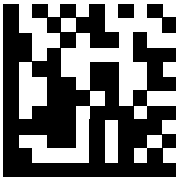
PDF417



Set

Enable PDF417 (Default)

Disable PDF417



End

Use command to set/get PDF417

Parameter # 18h

Set PDF417 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	18h	1 byte	1 byte	2 bytes

Data:

00h: Disable PDF417

01h: Enable PDF417 (Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read PDF417 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	18h	00h	FFh 1Dh

Receive: (Decoder send)

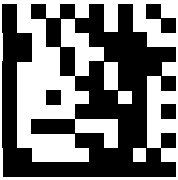
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	18h	00h	1 byte	2 bytes

Data:

00h: PDF417 Disable

01h: PDF417 Enable

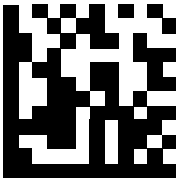
Micro PDF417



Set

Enable Micro PDF417 (Default)

Disable Micro PDF417



End

Use command to set/get Micro PDF417

Parameter # 19h

Set Micro PDF417 Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	19h	1 byte	1 byte	2 bytes

Data:

00h: Disable Micro PDF417

01h: Enable Micro PDF417 (Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Micro PDF417 Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	19h	00h	FFh 1Ch

Receive: (Decoder send)

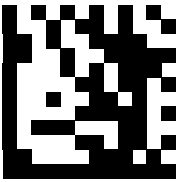
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	19h	00h	1 byte	2 bytes

Data:

00h: Micro PDF417 Disable

01h: Micro PDF417 Enable

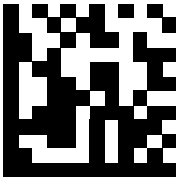
Data Matrix



Set

Enable Data Matrix (Default)

Disable Data Matrix



End

Use command to set/get Data Matrix

Parameter # 1Ah

Set Data Matrix Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Ah	1 byte	1 byte	2 bytes

Data:

00h: Disable Data Matrix

01h: Enable Data Matrix (Default)

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Data Matrix Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	1Ah	00h	FFh 1Bh

Receive: (Decoder send)

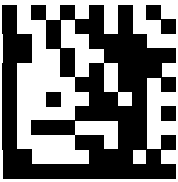
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Ah	00h	1 byte	2 bytes

Data:

00h: Data Matrix Disable

01h: Data Matrix Enable

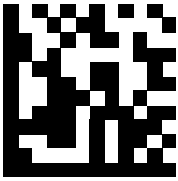
QR Code



Set

Enable QR Code (Default)

Disable QR Code



End

Use command to set/get QR Code

Parameter # 1Bh

Set QR Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Bh	1 byte	1 byte	2 bytes

Data:
00h: Disable QR
01h: Enable QR (Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read QR Setting

Send Packet Format (Host send)

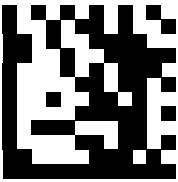
Length	Command	Parameter	Beep Code	Check sum
04h	C7h	1Bh	00h	FFh 1Ah

Receive: (Decoder send)

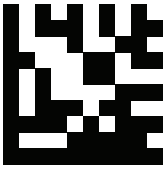
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Bh	00h	1 byte	2 bytes

Data:
00h: QR Disable
01h: QR Enable

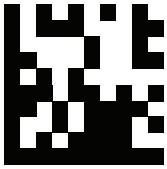
Micro QR Code



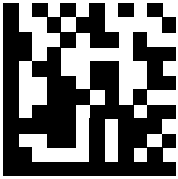
Set



Enable Micro QR Code (Default)



Disable Micro QR Code



End

Use command to set/get Micro QR

Parameter # 1Ch

Set Micro QR Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Ch	1 byte	1 byte	2 bytes

Data:
00h: Disable Micro QR
01h: Enable Micro QR (Default)

Beep Code:
0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Micro QR Setting

Send Packet Format (Host send)

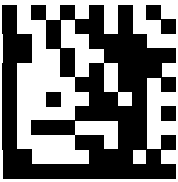
Length	Command	Parameter	Beep Code	Check sum
04h	C7h	1Ch	00h	FFh 19h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Ch	00h	1 byte	2 bytes

Data:
00h: Micro QR Disable
01h: Micro QR Enable

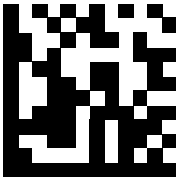
Aztec



Set

Enable Aztec

Disable Aztec (Default)



End

Use command to set/get Aztec

Parameter # 1Dh

Set Aztec Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Dh	1 byte	1 byte	2 bytes

Data:

00h: Disable Aztec(Default)

01h: Enable Aztec

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Aztec Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	1Dh	00h	FFh 18h

Receive: (Decoder send)

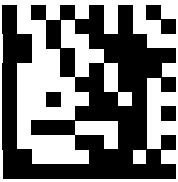
Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Dh	00h	1 byte	2 bytes

Data:

00h: Aztec Disable

01h: Aztec Enable

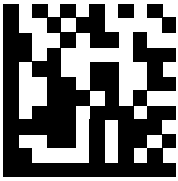
MaxiCode



Set

Enable MaxiCode

Disable MaxiCode (Default)



End

Use command to set/get MaxiCode

Parameter # 1Eh

Set MaxiCode Enable/Disable

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Eh	1 byte	1 byte	2 bytes

Data:

00h: Disable MaxiCode (Default)

01h: Enable MaxiCode

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read MaxiCode Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	1Eh	00h	FFh 17h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	1Eh	00h	1 byte	2 bytes

Data:

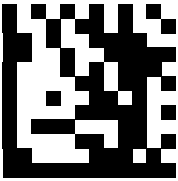
00h: MaxiCode Disable

01h: MaxiCode Enable

Symbology Features

This section provides the programming barcodes for selecting features available to different symbologies.

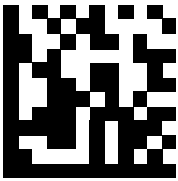
UPC / EAN



Set

Enable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8

Disable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8 (Default)



End

Use command to set/get UPC/EAN feature

Parameter # E0h

Set UPC/EAN feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	E0h	1 byte	1 byte	2 bytes

Data:

00h: Disable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8.(Default)

01h: Enable decoding of 2/5-digit supplemental code for UPC-A, UPC-E, EAN-13, and EAN-8.

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read UPC/EAN feature

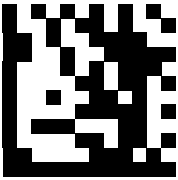
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E0h	00h	FEh 55h

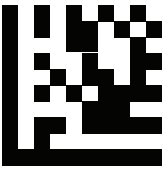
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	E0h	00h	1 byte	2 bytes

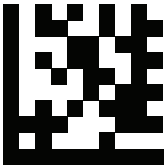
UPC-A



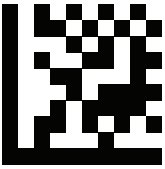
Set



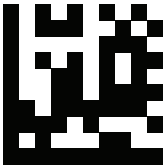
Enable UPC-A Number System digit (Default)



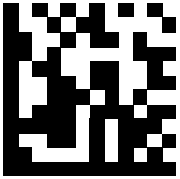
Disable UPC-A Number System digit



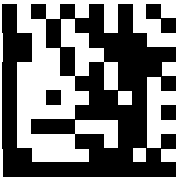
Enable UPC-A check digit (Default)



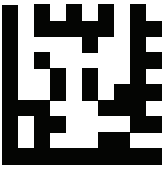
Disable UPC-A check digit



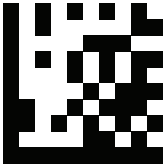
End



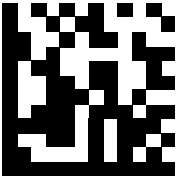
Set



Enable conversion of UPC-A to EAN13



Disable conversion of UPC-A to EAN13
(Default)



End

Use command to set/get UPC-A feature

Parameter # E1h

Set UPC-A feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
07h	C6h	E1h	1 byte	3 byte	2 bytes

Data:

D1: Enable/disable stripping of UPC-A Number System digit in decoded data.

D2: Enable/disable stripping of UPC-A check digit.

D3: Enable/disable conversion of UPC-A to EAN13

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read UPC-A feature

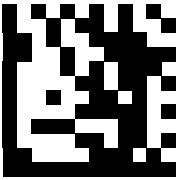
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E1h	00h	FEh 54h

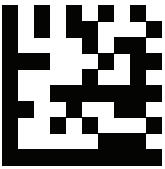
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
07h	C6h	E1h	00h	3 byte	2 bytes

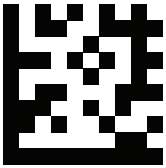
UPC-E



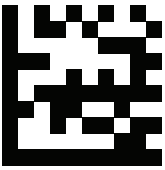
Set



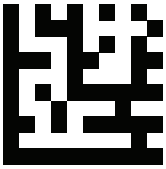
Enable UPC-E Number System digit (Default)



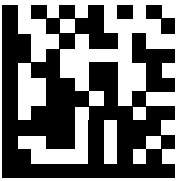
Disable UPC-E Number System digit



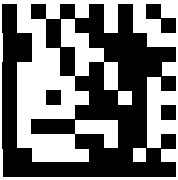
Enable UPC-E check digit (Default)



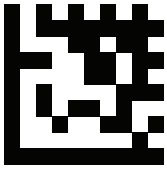
Disable UPC-E check digit



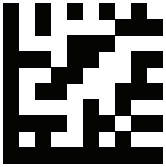
End



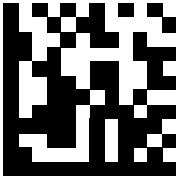
Set



Enable conversion of UPC-E to UPC-A



Disable conversion of UPC-E to UPC-A
(Default)



End

Use command to set/get UPC-E feature

Parameter # E2h

Set UPC-E feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
07h	C6h	E2h	1 byte	3 byte	2 bytes

Data:

D1: Enable/disable stripping of UPC-E Number System digit in decoded data.

D2: Enable/disable stripping of UPC-E check digit.

D3: Enable/disable UPC-E expansion.

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read UPC-E feature

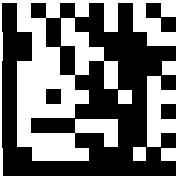
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E2h	00h	FEh 53h

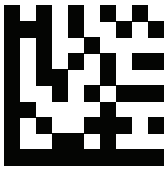
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
07h	C6h	E2h	00h	3 byte	2 bytes

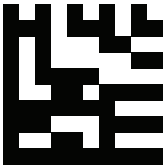
EAN 8



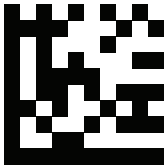
Set



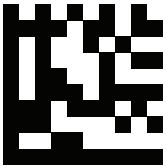
Enable EAN 8 check digit (Default)



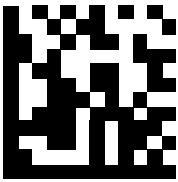
Disable EAN 8 check digit



Enable conversion of EAN 8 to EAN 13



Disable conversion of EAN 8 to EAN 13 (Default)



End

Use command to set/get EAN-8 feature

Parameter # E3h

Set EAN-8 feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	E3h	1 byte	2 byte	2 bytes

Data:

D1: Enable/disable stripping of EAN8 check digit.

D2: Enable/disable conversion of EAN8 to EAN13.

Beep Code:

0: Silent after completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read EAN-8 feature

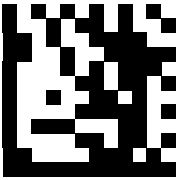
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E3h	00h	FEh 52h

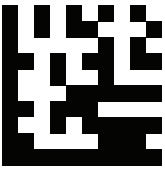
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	E3h	00h	2 byte	2 bytes

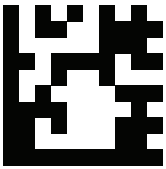
EAN 13



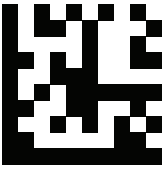
Set



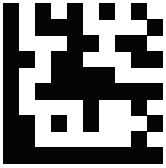
Enable EAN 13 check digit (Default)



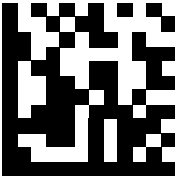
Disable EAN 13 check digit



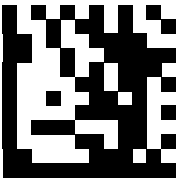
Enable conversion of EAN 13 to ISBN



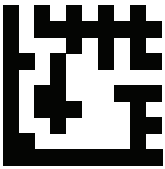
Disable conversion of EAN 13 to ISBN (Default)



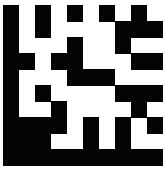
End



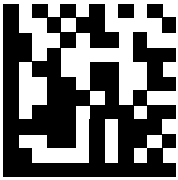
Set



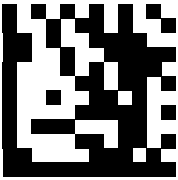
Enable conversion of EAN 13 to ISSN



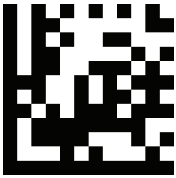
Disable conversion of EAN 13 to ISSN
(Default)



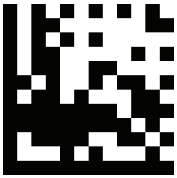
End



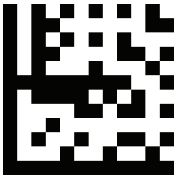
Set



EAN 13 data redundant check = off

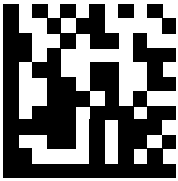


EAN 13 data redundant check = 1
(Default)



EAN 13 data redundant check = 2

EAN 13 data redundant check = 3



End

Use command to set/get EAN 13 feature

Parameter # E4h

Set EAN-13 feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
08h	C6h	E4h	1 byte	4 byte	2 bytes

Data:

D1: Enable/disable stripping of EAN13 check digit.
D2: Enable/disable conversion of Bookland to ISBN.
D3: Enable/disable conversion of Bookland to ISSN.
D4: Data redundant check(0~3)

Beep Code:

0: Silent after completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read EAN-13 feature

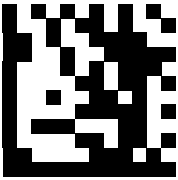
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E4h	00h	FEh 51h

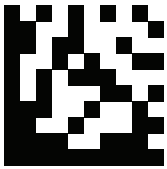
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
08h	C6h	E4h	00h	4 byte	2 bytes

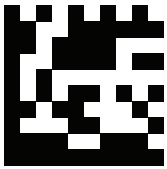
Code 39



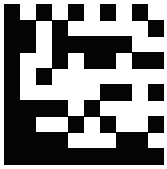
Set



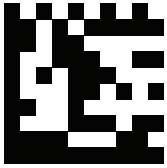
Enable Code 39 full ASCII mode



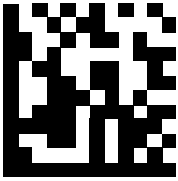
Disable Code 39 full ASCII mode (Default)



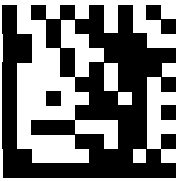
Enable Start and Stop characters



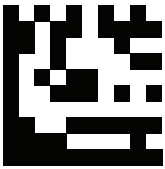
Disable Start and Stop characters (Default)



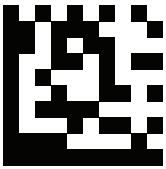
End



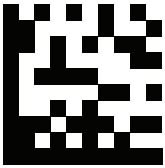
Set



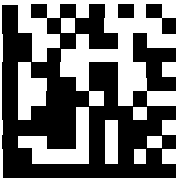
Disable Checksum (Default)



Enable checksum and send check character



Enable checksum and strip check character



End

Use command to set/get Code 39 feature

Parameter # E6h

Set Code 39 feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
0Ah	C6h	E6h	1 byte	6 byte	2 bytes

Data:

D1: Set Length L1. (Default 0)
D2: Set Length L2. (Default 0)
D3: Enable/disable Code 39 full ASCII mode. (Default disable)
D4: Enable/disable outputting of Code 39 Start and Stop characters. (Default disable)
D5: Enable/disable Code 39 checksum. (Default disable)
D6: Enable/disable strip check character. (Default disable)

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code 39 feature

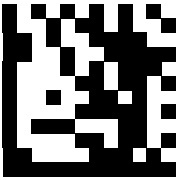
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E6h	00h	FEh 4Fh

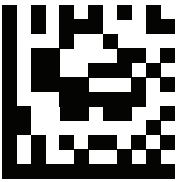
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
0Ah	C6h	E6h	00h	6 byte	2 bytes

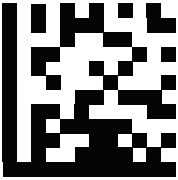
Codabar



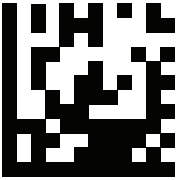
Set



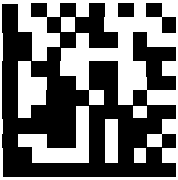
Disable Checksum (Default)



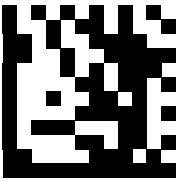
Enable checksum and send check character



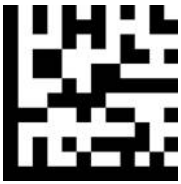
Enable checksum and strip check character



End

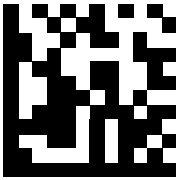


Set



Enable stripping Start and Stop characters

Disable stripping Start and Stop characters
(Default)



End

Use command to set/get Codabar feature

Parameter # E9h

Set Codabar feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
09h	C6h	E9h	1 byte	5 byte	2 bytes

Data:

D1: Set Length L1. (Default 0)
D2: Set Length L2. (Default 0)
D3: Enable/disable checksum. (Default disable)
D4: Enable/disable strip check character. (Default disable)
D5: Enable/disable stripping Start and Stop characters. (Default disable)

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Codabar feature

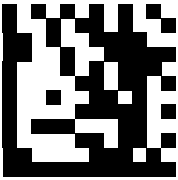
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E9h	00h	FEh 4Ch

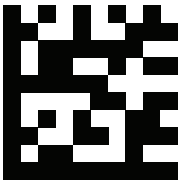
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
09h	C6h	E9h	00h	5 byte	2 bytes

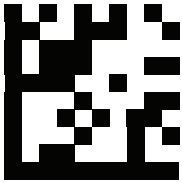
Interleaved 2 of 5



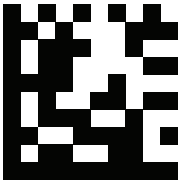
Set



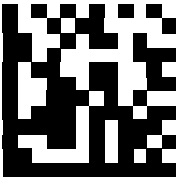
Disable Checksum (Default)



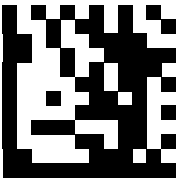
Enable checksum and send check character



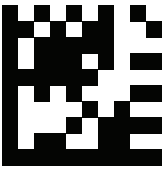
Enable checksum and strip check character



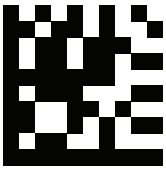
End



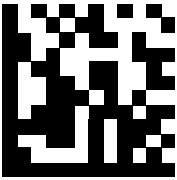
Set



Default quiet zone checking
No length checking performed (Default)



Smaller quiet zone allowed



End

Use command to set/get Interleaved 2 of 5 feature

Parameter # EBh

Set Interleaved 2 of 5 feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
09h	C6h	EBh	1 byte	5 byte	2 bytes

Data:

D1: Set Length L1. (Default 0)

D2: Set Length L2. (Default 0)

D3: Enable/disable Interleaved 2 of 5 checksum. (Default disable)

D4: Enable/disable strip check character. (Default disable)

D5: Set the minimum data length for Interleaved 2 of 5 and set default or short quiet zone checking.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Interleaved 2 of 5 feature

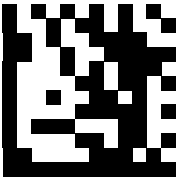
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	EBh	00h	FEh 4Ah

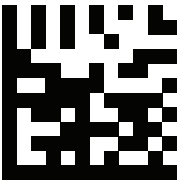
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
09h	C6h	EBh	00h	5 byte	2 bytes

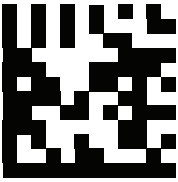
MSI / Plessey



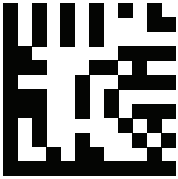
Set



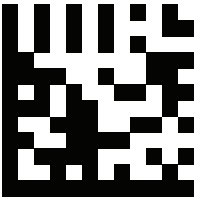
Disable MSI Plessey checksum



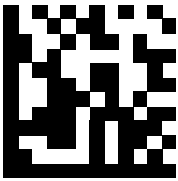
Mod 10 checksum (Default)



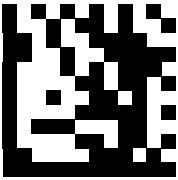
Mod 10/10 checksum



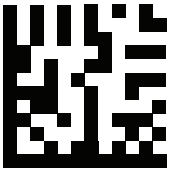
Mod 11/10 checksum



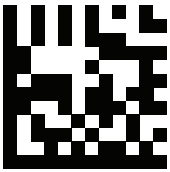
End



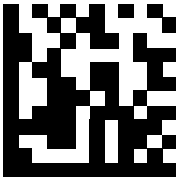
Set



Output checksum character(s) (Default)



Strip checksum character(s)



End

Use command to set/get MSI feature

Parameter # EAh

Set MSI feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
0Bh	C6h	EAh	1 byte	7 byte	2 bytes

Data:

D1: Set Length L1. (Default 0)
D2: Set Length L2. (Default 0)
D3: Enable/disable MSI checksum. (Default enable)
D4: Enable/disable stripping of MSI Plessey checksum character(s). (Default enable)
D5: Enable MSI Plessey Mod 10 checksum. (Default enable)
D6: Enable MSI Plessey Mod 10/10 checksum. (Default disable)
D7: Enable MSI Plessey Mod 11/10 checksum. (Default disable)

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read MSI feature

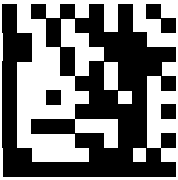
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	EAh	00h	FEh 4Bh

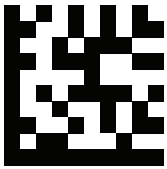
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
0Bh	C6h	EAh	00h	7 byte	2 bytes

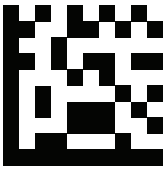
Code 11



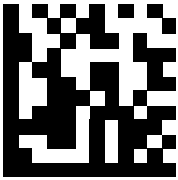
Set



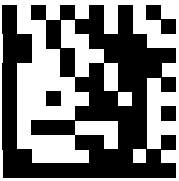
Output checksum character(s)



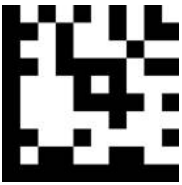
Strip checksum character(s) (Default)



End

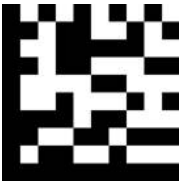


Set

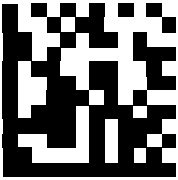


Disable checksum checking

Enable 1-digit checksum checking



Enable 2-digit checksum checking
(Default)



End

Use command to set/get Code 11 feature

Parameter # E8h

Set Code 11 feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
09h	C6h	E8h	1 byte	5 byte	2 bytes

Data:

D1: Set Length L1. (Default 0)

D2: Set Length L2. (Default 0)

D3: Enable/disable stripping of Code 11 checksum character(s). (Default disable)

D4: Enable Code 11 1-digit checksum checking. (Default disable)

D5: Enable Code 11 2-digit checksum checking. (Default enable)

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code 11 feature

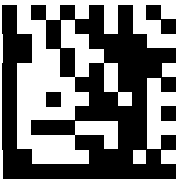
Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	E8h	00h	FEh 4Dh

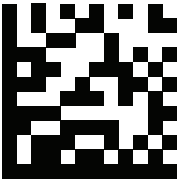
Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
09h	C6h	E8h	00h	5 byte	2 bytes

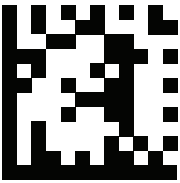
Data Matrix



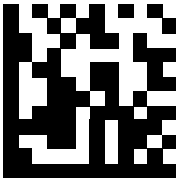
Set



Enable mirror decoding (Default)



Disable mirror decoding



End

Use command to set/get Data Matrix feature

Parameter # EEh

Set Data Matrix feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	EEh	1 byte	1 byte	2 bytes

Data:

D1: Enable/disable Data Matrix mirror image decoding. When enabled, both normal and mirror images of Data Matrix will be decoded.

D2: Enable/disable (standard) rectangular Data Matrix decoding.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

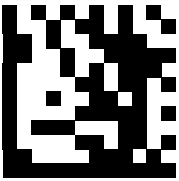
Read Data Matrix feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	EEh	00h	FEh 47h

Receive: (Decoder send)

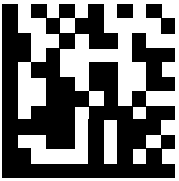
Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	EEh	00h	1 byte	2 bytes



Set

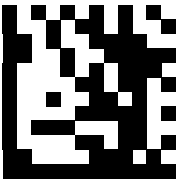
Enable rectangular Data Matrix decoding

Disable rectangular Data Matrix decoding
(Default)

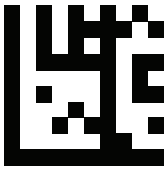


End

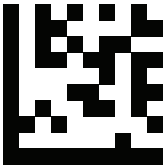
QR / Micro QR



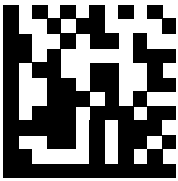
Set



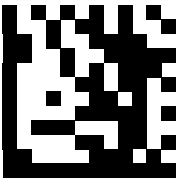
Enable mirror decoding (Default)



Disable mirror decoding



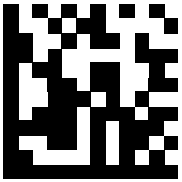
End



Set

UTF8 conversion for word only

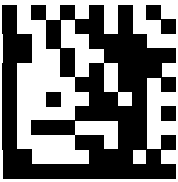
Universal UTF8 conversion (Default)



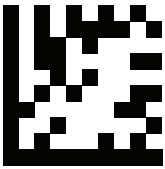
End

Note: Please install QR_UTF8_Conversion executable file before using this function.

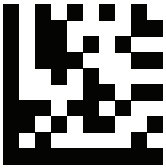
Aztec



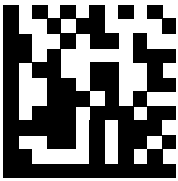
Set



Enable mirror decoding (Default)



Disable mirror decoding



End

Use command to set/get Aztec feature

Parameter # E6h

Set Aztec feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	F0h	1 byte	1 byte	2 bytes

Data:

D1: Enable/disable Aztec mirror image decoding. When enabled, both normal and mirror images of Aztec will be decoded.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Aztec feature

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	F0h	00h	FEh 45h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	F0h	00h	1 byte	2 bytes

Data Editing (Prefix, Suffix 1 & Suffix 2)

Prefix is additional characters that can be sent before the scanned data. Please scan the barcodes in the selection below to set your prefix.
Suffix is additional characters that can be sent after the scanned data. Please scan the barcodes in the selection below to set your suffix.
To set the transmission format please scan "**Scan Data Transmission Format**"

Prefix Set Up Flow

1. Scan Set.
2. Enable barcode type.
3. Scan the prefix you would like to add characters within ASCII Table.
4. Scan End.

Ex. If we wish to add "3" as prefix for all barcode type, then follow procedure as below, Scan [Set] to enter setup. Then we select barcode by scanning [Enable All], then we scan [3] as 3 of ASCII HEX. At the end, we scan [End] to completed setup.

Prefix & Suffix

	**Set**
	**Prefix**

	**Suffix 1**
	**Suffix 2**
	**End**

Use command to set/get Prefix/Suffix 1/Suffix 2 Value

Parameter:

Prefix # 63h
Suffix 1 # 62h
Suffix 2 # 64h

Set Prefix Value

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	63h	1 byte	1 byte	2 bytes

Data:
ASCII Character

Beep Code:
0: No sound after Completion
1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Prefix Value

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	63h	00h	FEh D2h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	63h	00h	1 byte	2 bytes

Data:
ASCII Character

Scan Data Transmission Format

	**Set**
	**Data As is (default)**
	**<DATA><SUFFIX 1>**
	**<DATA><SUFFIX 2>**

	**<DATA><SUFFIX 1><SUFFIX 2>**
	**<PREFIX><DATA>**
	**<PREFIX><DATA><SUFFIX 1>**
	**<PREFIX><DATA><SUFFIX 2>**

	**<PREFIX><DATA><SUFFIX 1><SUFFIX 2>**
	**End**

Use command to set/get Data Transmision Format

Parameter # 65h

Set Data Transmision Format

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	65h	1 byte	1 byte	2 bytes

Data:

00h: Data AS is (Default)
01h: Data + Suffix 1
02h: Data + Suffix 2
03h: Data + Suffix 1 + Suffix 2
04h: Prefix + Data
05h: Prefix + Data + Suffix 1
06h: Prefix + Data + Suffix 2
07h: Prefix + Data + Suffix 1 + Suffix 2

Beep Code:

0: No sound after Completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Data Transmision Format

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	65h	00h	FEh D0h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	65h	00h	1 byte	2 bytes

Data:

00h: Data AS is

01h: Data + Suffix 1

02h: Data + Suffix 2

03h: Data + Suffix 1 + Suffix 2

04h: Prefix + Data

05h: Prefix + Data + Suffix 1

06h: Prefix + Data + Suffix 2

07h: Prefix + Data + Suffix 1 + Suffix 2

Code Settings

Set Lengths for Codes

- One Discrete Length

  Select this option to decode the symbol containing a selected length.
  Select the length using the numeric barcodes in ASCII Code Table.

  Example 1:
  To decode Interleaved 2 of 5 symbols with 8 characters:
  a. scan Set to set up
  b. scan Interleaved 2 of 5 One Discrete Length
  c. scan 8 in ASCII Code Table
  d. scan End to confirm the setup

  Example 2:
  To decode Interleaved 2 of 5 symbols with 12 characters:
  a. scan Set to set up
  b. scan Interleaved 2 of 5 One Discrete Length
  c. scan 1 followed by 2 in ASCII Code Table
  d. scan End to confirm the setup

- Two Discrete Lengths

  Select this option to decode the symbol containing either of two selected lengths.
  Select lengths using the numeric barcodes in ASCII Code Table.

  Example:
  To decode Code 128 symbols containing either 8 or 14 characters
  a. scan Set to set up
  b. scan Code 128 Two Discrete Length
  c. scan 0, 8, 1, and then 4 in ASCII Code Table
  d. scan End to confirm the setup

- Length Within Range

  Select this option to decode the symbol with a specific length range.
  Select lengths using numeric barcodes in ASCII Code Table.

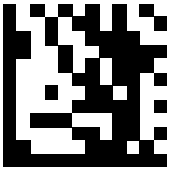
  Example:
  To decode Codabar symbols containing between 7 and 8 characters,
  a. scan Set to set up
  b. scan Codabar Length Within Range
  c. scan 0, 7, 0, and then 8 in ASCII Code Table
  d. scan End to confirm the setup

- Any Length

  Select this option to decode the symbol containing any number of characters within the digital scanner's capability.

  Example:
  a. scan Set to set up
  b. scan Matrix 2 of 5 Any Length
  c. scan End to confirm the setup

Set Lengths for Code 128



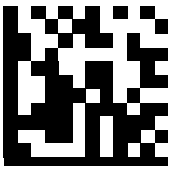
Set

One Discrete Length

Two Discrete Lengths

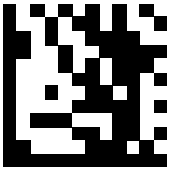
Length Within Range

Any Length (Default)



End

Set Lengths for Code 39



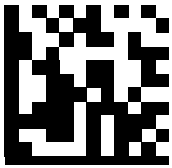
Set

One Discrete Length

Two Discrete Lengths

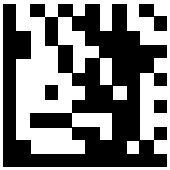
Length Within Range

Any Length (Default)



End

Set Lengths for Code 93



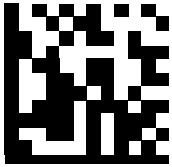
Set

One Discrete Length

Two Discrete Lengths

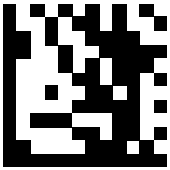
Length Within Range

Any Length (Default)



End

Set Lengths for Codabar



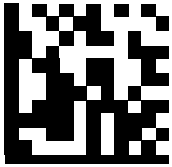
Set

One Discrete Length

Two Discrete Lengths

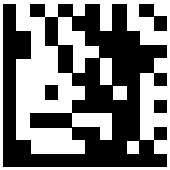
Length Within Range

Any Length (Default)



End

Set Lengths for Interleaved 2 of 5



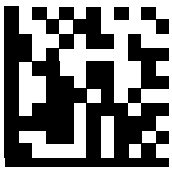
Set

One Discrete Length

Two Discrete Lengths

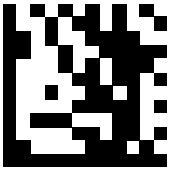
Length Within Range

Any Length (Default)



End

Set Lengths for Code 11



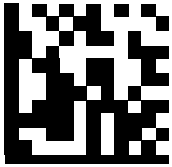
Set

One Discrete Length

Two Discrete Lengths

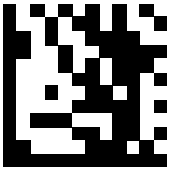
Length Within Range

Any Length (Default)

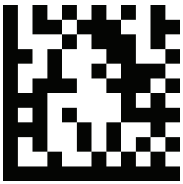


End

Set Lengths for MSI



Set

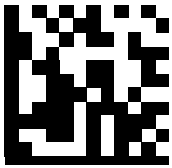


One Discrete Length

Two Discrete Lengths

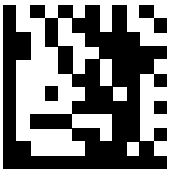
Length Within Range

Any Length (Default)



End

Set Lengths for Matrix 2 of 5



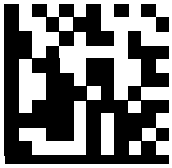
Set

One Discrete Length

Two Discrete Lengths

Length Within Range

Any Length (Default)



End

Use command to set/get Lengths

Parameter:

Code 93 # E7h
Code 128 # E5h
Matrix 2 of 5 # F1h

Set Lengths

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	1 byte	1 byte	2 byte	2 bytes

Data:

D1: Set Length L1.
D2: Set Length L2
One Discrete Length: L1>0, L2=0
Two Discrete Lengths: L1>L2>0
Length Within Range: L2>L1>0
Any Length: L1=0, L2=0 (Default)

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Lengths

Send Packet Format (Host send)

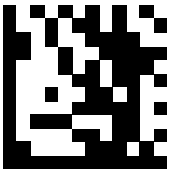
Length	Command	Parameter	Beep Code	Check sum
04h	C7h	1 byte	00h	2 bytes

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
06h	C6h	1 bytes	00h	2 byte	2 bytes

Code Identifiers

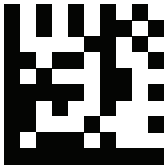
Scan the following barcodes to set symbology Identifiers.



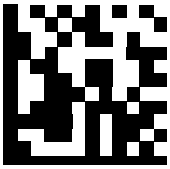
Set

Disable Code ID (Default)

Enable factory standard ID



Enable AIM ID



End

Use command to set/get Code ID

Parameter # 6Dh

Set Code ID

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	6Dh	1 byte	1 byte	2 bytes

Data:
00h: None
01h: AIM Code ID Character
02h: factory standard Code ID Character

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read Code ID

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	6Dh	00h	FEh C8h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	6Dh	00h	1 byte	2 bytes

Code Identifiers Table

Symbology	Factory Standard	AIM
UPC-A	A	E
UPC-E	E	E
EAN 8	FF	E
EAN 13	F	E
Code 128	K	C
Code 39	M	A
Code 93	L	G
Code 32	M	X
Code 11	O	H
Codabar	N	F
Plessey	P	P
MSI / Plessey	a	M
Interleaved 2 of 5	I	I
IATA 2 of 5	Z	R
Matrix 2 of 5	G	X
Straight 2 of 5	S	S
Pharmacode	H	X
RSS 14	RS	e
RSS Expanded	RX	e
RSS Limited	RL	e
Component CC-A	m	e
Component CC-B	n	e
Component CC-C	i	e
PDF417	r	L
Micro PDF417	s	L
Data Matrix	t	d
QR	u	Q
Micro QR	j	Q
Aztec	e	z
MaxiCode	v	U

Beep Code Definitions.:

Beep Code	Duration	Pitch	Number of Beeps
01h	Short	High	1
02h	Short	High	2
03h	Short	High	3
04h	Short	High	4
05h	Short	High	5
06h	Short	Low	1
07h	Short	Low	2
08h	Short	Low	3
09h	Short	Low	4
0Ah	Short	Low	5
0Bh	Long	High	1
0Ch	Long	High	2
0Dh	Long	High	3
0Eh	Long	High	4
0Fh	Long	High	5
10h	Long	Low	1
11h	Long	Low	2
12h	Long	Low	3
13h	Long	Low	4
14h	Long	Low	5
15h	Fast Warble	High-Low-High-Low	4
16h	Slow Warble	High-Low-High-Low	4
17h	Short	High-Low	2
18h	Short	Low-High	2
19h	Short	High-Low-High	3
1Ah	Short	Low-High-Low	3
1Bh	Fast Warble	High-High-Low-Low	4
1Ch	Fast Warble	High-High-High	3
1Dh	Long	High-Double High	2
1Eh	Long	Low-Double Low	2

Use command once to set/get all parameters

Parameter # FEh

Read all parameters

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	FEh	00h	FEh 37h

Receive: (Decoder send)

Length	Command	Parameter	Status	Data	Check sum
90h	C6h	FEh	00h	140 byte	2 bytes

Set all parameters

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
90h	C6h	FEh	1 byte	140 byte	2 bytes

Data:

See 140 bytes Parameter Definitions.

Beep Code:

0: No sound after Completion

1~30: Beep after completion. See Beep Code Definitions.

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

140 bytes Parameter Definitions:

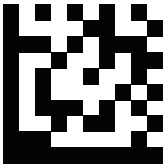
Byte	Parameter	Default Value	Can it be modified?
1~16	Model Name		X
17~32	Firmware Version		X
33~36	Readable Codes	0F8E127Dh	V
37	UPC-A Symbology	03h	V
38	UPC-E Symbology	03h	V
39	EAN-8 Symbology	01h	V
40	EAN-13 Symbology	01h	V
41	UPC_EAN Symbology	00h	V
42~43	Code 128 Symbology	00h	V
44~46	Code 39 Symbology	00h	V
47~48	Code 93 Symbology	00h	V
49-51	Codabar Symbology	00h	V
52~54	I25 Symbology	00h	V
55~56	M25 Symbology	00h	V
57~59	MSI Symbology	070000h	V
60~62	Code 11 Symbology	040000h	V
63	RSS 14 Symbology	00h	V
64	RSS Expanded Symbology	00h	V
65	Data Matrix Symbology	01h	V
66	QR Symbology	01h	V

67	Aztec Symbology	01h	V
68	CID	01h	X
69	Parameter Scanning	01h	V
70	Power Mode	01h	V
71~72	Exposure Time	01F4h	V
73	Fixed Gain	30h	V
74	Decode Time	5Ah	V
75	Work Mode	00h	V
76	Output Type	02h	X
77	Decode LED	03h	V
78	Decode Aiming Pattern	00h	V
79	Decoding Illumination	00h	V
80	Beeper	01h	V
81~84	Beeper Duration	2710h	V
85~88	Beeper Tone	0AF0	V
89	Standby Time	05h	V
90	Blink Mode Time	00h	V
91~92	Same code Delay Time	03E8h	V
93	Reserved	01h	X
94	Performance	30h	V
95	Reserved	00h	X
96	Reserved	F9h	X

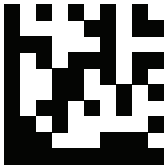
97	RS232 Parity Type	00h	V
98	RS232 Stop Bits	01h	V
99	RS232 Data Bits	08h	V
100	Software Handshaking	00h	V
101~104	RS232 Baud Rate	01C200h	V
105~108	USB	04000100h	X
109	JPOS	00h	V
110	Check Character A5h	5Ah	X
111	Reserved	00h	X
112	Code ID	00h	V
113	Prefix	0Dh	V
114	Suffix 1	0Dh	V
115	Suffix 2	0Dh	V
116	Scan Data Transmission Format	00h	V
117~128	Reserved	00h	X
129~130	Reserved	0221h	X
131~132	Reserved	0221h	X
133~136	Reserved	00h	X
137	Reserved	01h	X
138	Check Character 5Bh	5Bh	X
139~140	Reserved	00h	X

ASCII Code

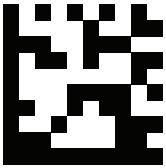
For parameters requiring specific numeric values, scan the appropriately numbered barcode(s).



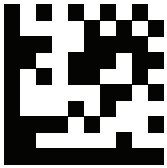
Space



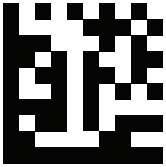
!



"



#



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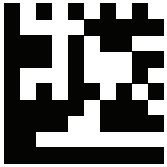

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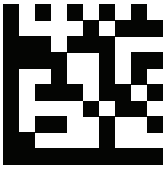
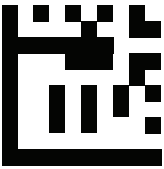
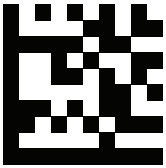


&



'



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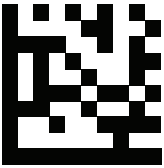

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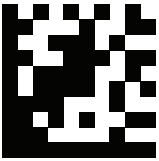
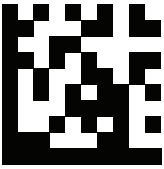
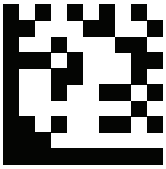


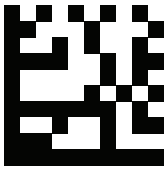
*



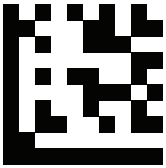
+



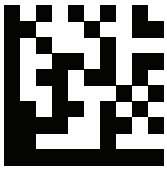
,



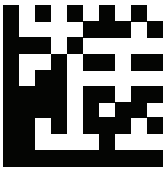
-



.



/



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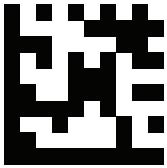

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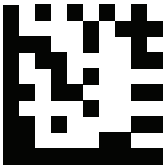

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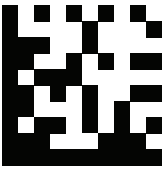

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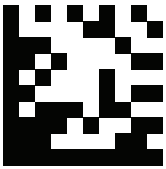

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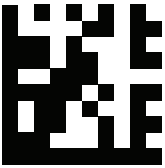

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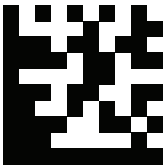

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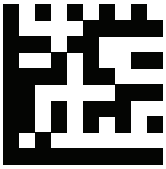

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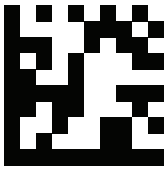

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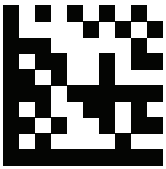

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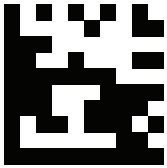

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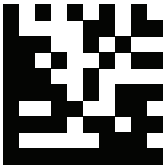

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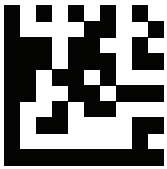

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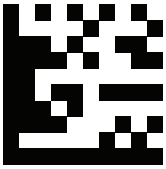

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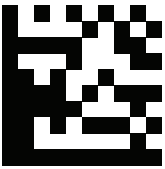

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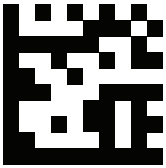

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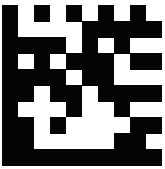

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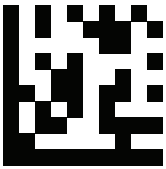

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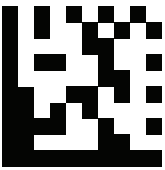

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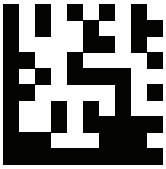

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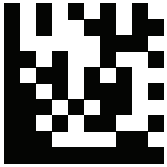

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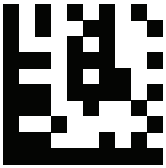

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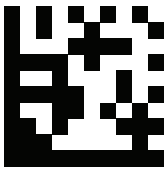

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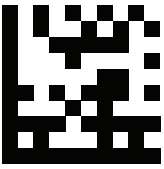

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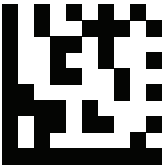

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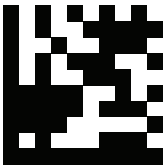

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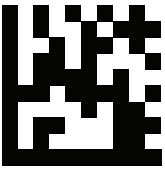

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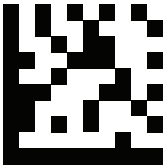

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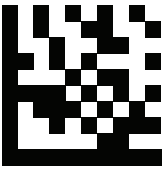

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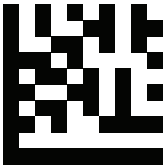

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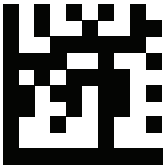

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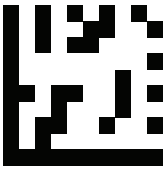

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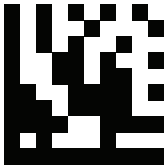

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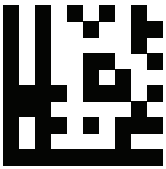

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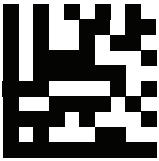

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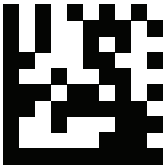

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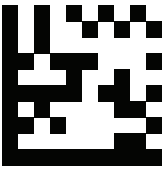

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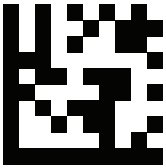

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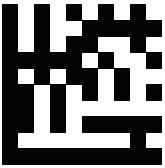

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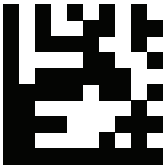

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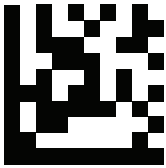

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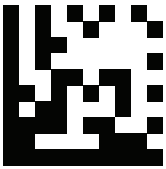

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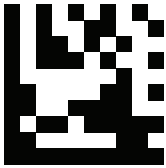

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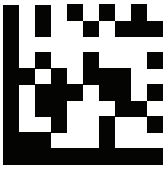

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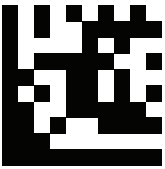

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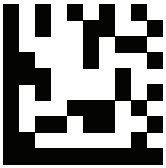

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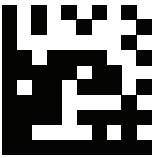

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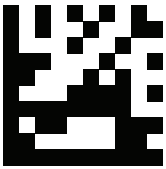

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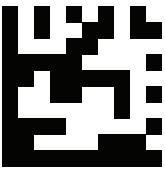

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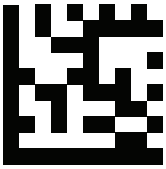

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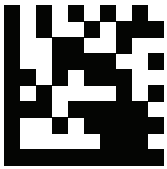

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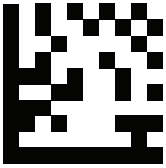

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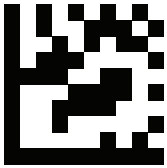

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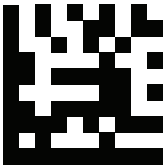

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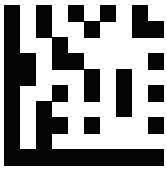

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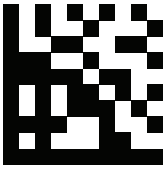

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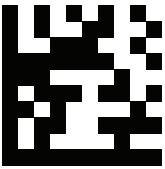

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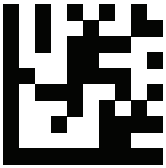
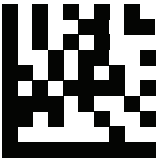
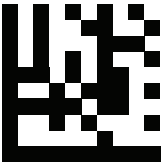


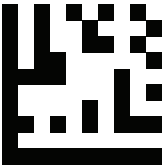
o



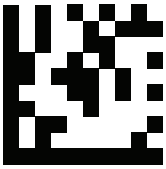
p



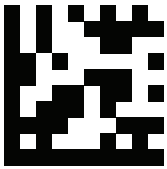
q



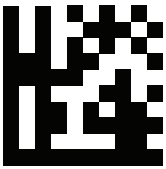
r



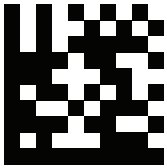
s



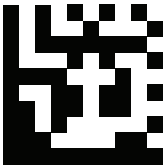
t



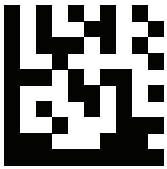
u



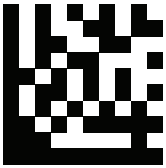
v



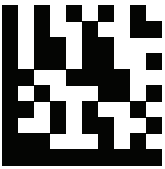
w



x



y



z

Insert

Delete

Home

End

Up arrow

Down arrow

Left arrow

Right arrow

Tab

Backspace

Shift

ESC

Page up

Page down

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

F11

F12

Image Capture

This packet contains image information. Images send from the Z-5212 to the host are described by the image preamble contained in the 12 bytes of first packet of the image. The details of the image preamble follow.

Use command to read the last image (for Trigger Mode & VCOM)

Command # B1h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	B1h	00h	00h	FFh 4Bh

Received: filed descriptions

Field Name	Format	Size	Description
Length	0Ch	1 Byte	Size of image header
Opcode	B1h	1 Byte	
Image Size	1280,720	4 Byte	Image data height & width
Barcode Position	X,Y	4 Byte	Barcoded center location
Decode Time	ms	2 byte	Time spent decoding
Image Data		921600	Image Data records.

Use command to enable/disable Good Decode Image(for Trigger Mode & VCOM)

Command # B3h

Packet Format (Host send)

Length	Command	Type	Beep Code	Check sum
04h	B3h	1 bytes	00h	2 bytes

Type:

1: Enable Good Decode Image.

0: Disable Good Decode Image

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

USB Virtual COM Driver Installing

If you use virtual COM port emulation, follow the steps below to start using the scanner.

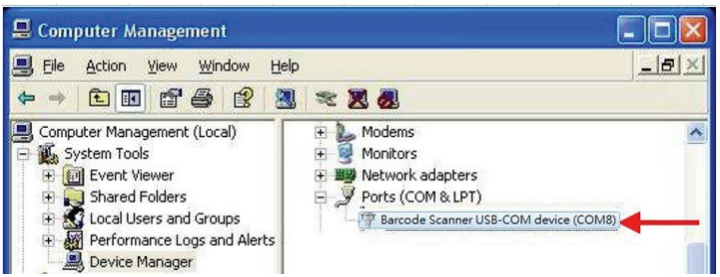
1. Execute the driver (ZEBEX VCOM Driver Installation.exe).
2. Connect the scanner USB cable to the host computer.
3. Set the interface to USB Virtual COM Port.

Set

USB Virtual COM Port
*Driver required

End

4. On the computer, check Device Manager to see if the computer successfully detects the scanner as “Barcode Scanner USB-COM device.” (The COM port number would vary depending on different hardware environment).

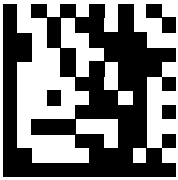


JavaPOS Setting

This section provides the programming barcodes for setting JavaPOS and the flow of installing JavaPOS driver.

JavaPOS

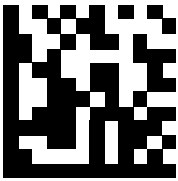
Scan the following barcodes to enable or disable JavaPOS.



Set

JPOS Enable

JPOS Disable (Default)



End

Use command to set/get JPOS

Parameter # 61h

Set JPOS

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	61h	1 byte	1 byte	2 bytes

Data:

00h: Disable
01h: Enable

Receive: (if software handshaking is enabled)

Length	Command	Parameter	Status	Check sum
04h	D0h	00h	00h	FFh 2Ch

Read JPOS Setting

Send Packet Format (Host send)

Length	Command	Parameter	Beep Code	Check sum
04h	C7h	61h	00h	FEh D4h

Receive: (Decoder send)

Length	Command	Parameter	Beep Code	Data	Check sum
05h	C6h	61h	00h	1 byte	2 bytes

JavaPOS Version

Our JavaPOS driver now is compatible with JavaPOS1.7.

Install the Java2 Runtime Environment

The JRE is Java's virtual machine that allows for applications to run on the host computer. To be able to run the JavaPOS application, you need a 1.7 version JRE. Ignore the following steps if you already have a JavaPOS1.7 or a later version in your host computer.

- Go to http://java.sun.com, and select this version of Java Runtime Environment.
- Install the program following the instructions.

Install the Service Object and JavaPOS files

In the "\Driver" folder, there are two files: ZbtJavapos.jar and jpos.xml. Please include ZbtJavapos.jar at your CLASSPATH and also copy the related "JPosEntry" option from the jpos.xml to your application's jpos.xml.

How to use RS232 scanner with JavaPOS Driver

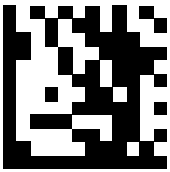
Install the Java RXTXcomm API
In the \RXTXcomm folder, there are four files: rxtxSerial.dll , rxtxParallel.dll, and RXTXcomm.jar. Please do the following steps to install the library.

1. Copy rxtxSerial.dll and rxtxParallel.dll to C:\Windows\system32.
2. Copy RXTXcomm.jar to your <JRE Install Folder>\lib directory.

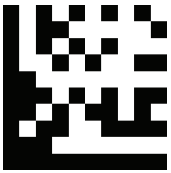
Use barcodes to configure the scanner

JavaPOS configuration barcodes:

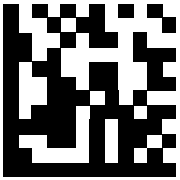
Set



JPOS Enable



End



Running the JavaPOS Test utility

Please run the test application POStest.sh to evaluate your installation.

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How to use JavaPOS driver at your application

1. Add “ZbtJavaPos**.jar**” from the “\Driver” folder to the CLASSPATH and copy the related “JPosEntry” option from the “**jpos.xml**”.
2. Modify the jpos.xml based on your COM Port
3. Example of jpos.xml file content

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>
<!--Saved by JavaPOS jpos.config/loader (JCL) version 2.2.0 on 2010/3/11    10:16-->

      <JposEntry logicalName="Z3172P">
            <creation factoryClass="com.zbt.jpos.ZbtJposServiceInstanceFactory"
serviceClass="com.zbt.jpos.ScannerService"/>
            <vendor name="" url=""/>
            <jpos category="Scanner" version="1.7"/>
            <product description="Scanners" name="Scanner" url=""/>

            <!--Other non JavaPOS required property (mostly vendor properties and bus specific
properties i.e. RS232 )-->
            <prop name="deviceType" type="String" value="2D"/>
            <prop name="deviceBus" type="String" value="RS232"/>
            <prop name="baudRate" type="String" value="115200"/>
            <prop name="parity" type="String" value="None"/>
            <prop name="portName" type="String" value=" COM1"/>
            <prop name="flowControl" type="String" value="None"/>
            <prop name="stopBits" type="String" value="1"/>
            <prop name="dataBits" type="String" value="8"/>
</JposEntry>

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>


</JposEntries>
```

Note: The default baud rate : 2D scanner =115200

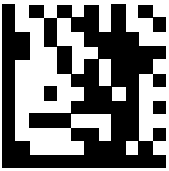
How to use USB scanner with JavaPOS Driver

Configuring the Scanner via barcodes:

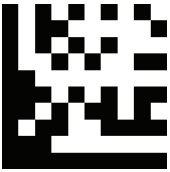
- Scan the barcodes in the sequence below to configure the scanner to usb-serial mode.

JavaPOS configuration barcodes:

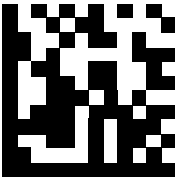
Set



JPOS Enable



End



Install the Java RXTXcomm API

In the \RXTXcomm folder, there are four files: rxtxSerial.dll , rxtxParallel.dll, and RXTXcomm.jar. Please do the following steps to install the library.

1. Copy rxtxSerial.dll and rxtxParallel.dll to C:\Windows\system32
2. Copy RXTXcomm.jar to your <JRE Install Folder>\lib directory.

Running the JavaPOS Test utility

Please run the test application to evaluate your installation.

How to Use JavaPOS Driver at your application

1. In the "\Driver" folder, copy "**ZbtJavaPos.jar**" and "**jpos.xml**" to your work folder.
2. Modify the jpos.xml .
3. Example of jpos.xml file content

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>
<!--Saved by JavaPOS jpos.config/loader (JCL) version 2.2.0 on 2010/3/11    10:16-->

      <JposEntry logicalName="Z3172P">
            <creation factoryClass="com.zbt.jpos.ZbtJposServiceInstanceFactory"
serviceClass="com.zbt.jpos.ScannerService"/>
            <vendor name="" url=""/>
            <jpos category="Scanner" version="1.7"/>
            <product description="Scanners" name="Scanner" url=""/>

            <!--Other non JavaPOS required property (mostly vendor properties and bus specific properties i.e.
RS232 )-->
                  <prop name="deviceType" type="String" value="2D"/>
            <prop name="deviceBus" type="String" value="RS232"/>
            <prop name="baudRate" type="String" value="115200"/>
            <prop name="parity" type="String" value="None"/>
            <prop name="portName" type="String" value=" COM56"/>
            <prop name="flowControl" type="String" value="None"/>
            <prop name="stopBits" type="String" value="1"/>
            <prop name="dataBits" type="String" value="8"/>
</JposEntry>

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE JposEntries PUBLIC "-//JavaPOS//DTD//EN"
                                        "jpos/res/jcl.dtd">
<JposEntries>

</JposEntries>
```