#### **Barcode reader setup manual**

#### Setup procedures are as follows:

- 1、 Scan "Begin setting"
- 2. Scan your required function and its corresponding barcode
- **3**、 Scan "End setting"
- 4. All the setting parameters will be saved after scanning "Save setting parameter"
- 5. All the settings will be returned to the manufacture default parameters after scanning "Setup the manufacture parameters"

#### Attention:

- **1.** This manual is available for a special barcode reader which produced by our company
- 2. The symbol '\*' means default condition
- 3. All the settings will be saved after scanning "Save the setting parameters" barcode if needed, otherwise the settings will be missing and return to the last settings that you saved after off power









#### Note:

1、 Trigger ON/OFF: Light source will shine when press switch, otherwise light source won't shine, Keep pressing until read some information, then the light source will go out.

2. Continue scan/Trigger Disable: The same information will be only read once unless move to other information, then move the reader to the barcode again and scan.

3. Twinkle: The same information will be only read once unless move to other information, then move the reader to above of the barcode/no information in front of the reader, the light source will start to twinkle in 6 seconds.

4, Continue scan/Auto-inductive Enable: The same information

will be only read once unless move to other information, then move the scanner to the barcode again and read. In addition, power supply turns on automatically and light source keeps long shine (The switch can't control power supply)

5, Twinkle/Auto-inductive Enable: The same information will be only read once unless move to other information, light source will start to twinkle in 6 seconds (The switch can control power supply)

## **RS232** parameters setup Baud rate 600 2400\*9600 38400





#### Handshake protocol

Note: Exchange pre-setup control signals or charactes' programme when two installations or systems build connections...



Keyboard wedge parameters setup

#### **Terminal types**



IBM PS/2 25,30

Apple Desktop Bus(ADB)











ALT keystroke function: When this function is ON, the original setting character model of barcode will not be changed in spite of the keyboard lock is ON or OFF, that's to say this function will not be affected by the keyboard lock, but it's only available for PC.





Figure keystrokes: Output by figure keystrokes' scanning barcode after this function is ON.

#### Output charaters parameters definition

End symbol















STX-ETX: Only available for RS-232. Add STX's ASCII before output barcode and ETX's ASCII after output barcode

#### Intercharacter time-delay







#### **Explanation:**

Put off the time of intercharacter transmission







#### **Emulational lightpen parameters definition**

#### **TTL signal statement**

\*BAR denotes high electric frenquency



BAR denotes low electric frenquency



Scan rate





Output original barcode format







**Explanation: Output by** CODE39 **Barcode parameters definition** 

Choose identified barcode





\*EAN-13/JAN-13 Enable

\*EAN-8/JAN-8 Enable

\*CODE 39 Enable



















All barcodes Enable

UPC/EAN/JAN parameters definition

Choose barcode types



#### Complementary bit setup









#### **CODE 39 parameters definition**

#### Choose barcode types





Italy Medicine Bureau barcode Enable



#### Transmit parity bit setup





Output begin/end character setup (begin/end are '\*')





Decoding symbol "\*" (CODE 39)





#### Barcode length setup



#### Fixed length (Be able to setup two groups)



2 Algorism number (Appendix A)

2、 Algorism number (Appendix A)



2. Algorism number (Appendix A)

#### **Explanation:**

- 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting
- 2、'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable
- 3、 'Minimum length' setup characters' minimum length. Output will be disable if the set value is less than it.

#### **CODE 128** parameters definition

#### Transmit parity bit setup

No calculate parity bit









'FNC2' is CODE128 special cluster-connected function

Setup 'ON' means to read CODE 128 and be able to cluster-connect next CODE128  $% \left( \mathcal{O}_{1}^{2}\right) =0$ 

Setup 'OFF' means to just read the odd CODE 128

#### **Barcode length setup**



#### Fixed length (Be able to setup two groups)

1 Group 1 Begin

2、 Algorism number (Appendix A)



2、 Algorism number (Appendix A)

2、 Algorism number (Appendix A)

#### Explanation:

1、 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

 $2_{s}$  'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable  $3_{s}$  'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

#### **INTERLEAVE 25 parameter definition**

#### Transmit parity bit setup



Parity number setup

\*Even



Brazil bank barcode

\*OFF

Barcode length setup



Calculate and transmit parity bit





#### Fixed length (Be able to setup two groups)



2、 Algorism number (Appendix A)

2、Algorism number (Appendix A)

2、 Algorism number (Appendix A)

**Explanation:** 1, 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2, 'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable

3、 'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

#### **INDUSTRIAL 25 Parameter definition**

#### Transmit parity bit setup



# Calculate and transmit parity bit

#### **Barcode length setup**

\*Non-fixed length



Fixed length (Be able to setup two groups)



2、 Algorism number (Appendix A)



Minimum length



#### Explanation:

1, 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2、 'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable
3、 'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

#### **MARRIX 25 Parameter definition**

Transmit parity bit setup

2、 Algorism number (Appendix A)

2、 Algorism number (Appendix A)



Calculate and transmit parity bit



Barcode length setup



Fixed length (Be able to setup two groups)



2、 Algorism number (Appendix A))

2, Algorism number (Appendix A)



2、Algorism number (Appendix A)

#### **Explanation:**

1, 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2, 'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable 3, 'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it

#### **CODABAR/NW7** Parameter definition

#### Begin/End character setup before transmitting











#### Fixed length (Be able to setup two groups)



#### Explanation:

 $1_{\scriptscriptstyle N}$  'Non-fixed length' denotes that output characters are the same as

2. Algorism number (Appendix A)

2、 Algorism number (Appendix A)

2. Algorism number (Appendix A)

barcode characters and no limiting

2、'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable
3、'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it

#### **CODE 93 Parameter definition**

#### Transmit parity bit

Calculate 2 parity bits, no transmit



#### **Barcode length setup**





2, Algorism number (Appendix A)

#### Fixed length (Be able to setup two groups)

1 、 Group 1 Begin







2、 Algorism number (Appendix A)

2、 Algorism number (Appendix A)

#### Explanation:

1, 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2、'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable 3、'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

#### **CODE 11 Parameter definition**

#### Transmit parity bit setup



#### **Barcode length setup**

\*Non-fixed length

#### Fixed length (Be able to setup two groups)



2, Algorism number (Appendix A)



Calculate and transmit one parity bit



2. Algorism number (Appendix A)

2、 Algorism number (Appendix A)

 $1\,{}_{\times}\,$  'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2、'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable
3、'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

### MSI/PLESSEY Parameter definition Transmit parity bit setup



Calculate and transmit parity bit

Calculate parity bit, no transmit

#### Barcode length setup

\*Non-fixed length

#### Fixed length (Be able to setup two groups)



2, Algorism number (Appendix A)



1、 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2, 'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable

3、 'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

2、 Algorism number (Appendix A)

2、 Algorism number (Appendix A)

#### **BC 412 Parameter definition**



\*Calculate and transmit parity bit



Barcode length setup \*Non-fixed length

#### Fixed length (Be able to setup two groups)



2、Algorism number (Appendix A)

2, Algorism number (Appendix A)



#### Minimum length



2、 Algorism number (Appendix A)

#### Explanation:

1, 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2, 'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable 3, 'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

#### **CODE 2 OF 6 PARAMETERS**

Transmit parity bit setup No calculate parity bit


Calculate parity bit, no transmit



#### **Barcode length setup**



#### Fixed length (Be able to setup two groups)



2, Algorism number (Appendix A)

2、Algorism number (Appendix A)

### Minimum length



2. Algorism number (Appendix A)



#### **Explanation:**

1、 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2, 'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable

3、 'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

#### **TELEPEN Parameter definition**





Calculate and transmit parity bit



Calculate parity bit, no transmit



#### **Barcode length setup**



#### Fixed length (Be able to setup two groups)



2, Algorism number (Appendix A)

2、 Algorism number (Appendix A)

### Minimum length



- 3、End
- Explanation:

1, 'Non-fixed length' denotes that output characters are the same as barcode characters and no limiting

2, 'Fixed length' denotes that the setting barcode length is fixed, barcode characters are the same as the set value, otherwise output will be disable

3、 'Minimum length' sets characters' minimum length. Output will be disable if the set value is less than it.

#### Integrative parameter definition

#### Language choice





2、 Algorism number (Appendix A)



## German Switzerland tongue Japanese Portuguese Dutch

#### Barcode distinguishing symbol definition







#### **Explanation:**

UPC-A

EAN-13/JAN-13

CODE 39

When this function is ON, there is a character which appends after decoding code and before code each time. You can judge the barcode type which are decoded according to the following representations.

Barcode type	Identifier	Barcode type	Identifier
UPC-A	А	UPC-E	В
EAN-8	С	EAN-13	D
CODE 39	E	CODE-128	F
INTERLEAVE 25	5 G	INDUSTRIAL 25	Н
MATRIX 25	Ι	CODABAR/NW7	J
CODE 93	Κ	CODE 11	L
China post barcoc	le M	MSI/PLESSEY	Ν
BC412	0	CODE 2 OF 6	Р
TELEPEN	Т		















#### Explanation: The delayed time between two data output

- 1. Reduce the rate of mis-decoding.
- 2. This option is repeating decoding times. The more decoding, the more accurate of output information, but the time of decoding will increase accordingly at the same time.

#### Beep volume definition







#### Continue distinguish delicacy definition







#### Explanation:

Fast / Slow is the decoder speed under continue mode.

#### Notebook function definition



Inverted output character definition







#### **Explanation:**

Barcode data will be output in inverted.

For example: a barcode data is: 12345, the output result is 54321 when the function is ON..

Delete output character definition Setup deleting character

Setup a certain barcode (Be able to setup 6 groups data in total simultaneously)

Delete some characters from start with a certain characters.

#### According to the following steps:

- 1、 Scan corresponding group barcode;
- 2、 Scan corresponding barcode type;
- Scan the barcode of representating "delete character location" in appendix A;
- 4. Scan the "end" barcode of "deleting character location";

- 5. Scan the barcode of representating "delete character quantity" in appendix A;
- $6_{\text{N}}$  Scan the "end" barcode of "deleting character quantity".
- 7、 Repeat the above steps, you can setup another group deleting definition.

#### Choose deleting group definition





















#### Deleting character location

1、Algorism number

(Appendix A) Delete character quantity 1, Algorism number





(Appendix A)

Insert character definition

Setup inserting characters

Setup a certain barcode (Be able to setup 6 groups data in total simultaneously)

#### Insert several charaters from start with a certain character

#### According to the following steps:

- 1. Scan corresponding group barcode;
- 2、 Scan corresponding barcode type;
- Scan the barcode of representating "insert character location" in appendix A;
- 4. Scan the "end" barcode of "insert character location";
- 5. Scan the barcode of representating "insert character" in appendix B or appendix B;

- 6. Scan the "end" barcode of "insert character";
- 7. Repeat the above steps, you can setup another group inserting definition.

#### Choose inserting group definition







#### Choose barcode type definition



















#### Insert character location

1、Algorism number



(Appendix A)

#### **Insert characters**

1、ASCII table、Function keys table



(Appendix B、Appendix C) Setup infrared ray inductor \*OFF







# 9

B

Algorism number Table







#### **ASCII Table**









































"

























,







































<



















































































































#### Appendix C





F5





F11

#### **Function keys Table**















Home



Down











#### Appendix D

#### General fault elimination of barcode reader

- 1. Q: Why will some data be missed out when using Keyboard wedge interface?
  - A: There is important relation between Keyboard wedge interface and the receiving speed of host computer. Generally this case arises, it's because the speed of the reader's transmitting data can't cooperate with the host. The solution is to change the character time-delay of the reader.
- 2. Q: Why are there no data of decoding on the screen or disorderly barcode when using RS232 interface?

A:

- a. Please confirm if the reader has been setup RS232 interface first
- b. Confirm setup RS232 interface communication parameter is in correspondence with the communication software of the host For example 9600, N, 8,1
- c. Please confirm if setup handshake protocol
- d. The host need to have communication software which receives data when using RS232 interface, and it can't receive the data from the reader in common documents processing software. If under Microsoft Windows system, you can test it in super terminal.
- 3. Q: The host can't normally work when using RS232 interface to decode only once?

A: Please check if the handshake protocol is ON. If handshake protocol is ON, the host has no corresponding communication software, the reader can't continue to work because it has to wait the host's replying data, please try closing the handshake protocol and test

4. Q: Why is there different in skip line when using different software to

receive data from the decoder?

A: Because the reader usually adds a attached character at the end of decoding data (Terminal setup), this character is so-called controlling character (ASCII 00h-1FH) and not usually displayed on the screen. The receiving software mainly uses it to do the succedent work, so the receiving software will be displayed on the screen not the reader, and so there is different in skip line when using different software, this is normal case. You can change this situation just through modifying the settings of terminal equipment.

- Q: Why is there no start-up sound after start up power supply?
  A: Check if connection wire is in good condition, if the connection wire is OK, please check if the reader's interface is also OK. (Suggest the user to test in another connection wire, or test in different equipments and in the same connection wire).
- 6. Q: The reader starts up, but the barcode can't be read or can be read with some difficulty?

A: Choose those barcode with clear printing or easy-to-read to scan. Please test after enactment "setup factory parameter" if sometimes readable or not readable. If the matter exists unceasingly, please look at the inside optics system equipment with eyes (let LED is OFF before looking) to see if there is something dirty attaching the surface of reflector or protection flake, if there is something dirty, get a piece of cotton cloth to wipe it, if the matter still can't be solved, please send it to the manufacturer to mend.

- 7 Q: Why can't the keyboard work after the reader starts up?
  - A: Please get another type keyboard or host to test. This is consistent condition if doable; and enactment "setup factory parameter" if undoable, the reader is inserted and pulled afresh or use another wire to test, if the matter still can't be solved, please sent it to the manufacturer to mend.

8 Q: Why can't the reader download/upload data?

A: a. Please first turn on functions of the notebook PC if using the notebook PC.

b. If using WinNT/2000/XP, please login out, then login in and enactment "setup manufacture parameter" and "save the setting parameter", them exit download model and remove the reader to insert afresh, and perform download function again.

c. Please confirm using correct COM port and communication parameter when using RS232 interface; or check if connection wire is OK; or inquire about software edition and discuss with engineer

d. Please confirm connecting keyboard or replace another keyboard; or test with different operating system; or inquire about software edition and discuss with engineer.

#### Appendix E

#### Some common ways to Keep the reader in good condition

- 1. Keep the protection flake clean
- 1) Protection flake: It's used for keeping dust or something dirty from entering into the inside reader, so cleaning the protection flake regularly is necessary to ensure accurately reading barcode.
- The protection flake is not suitable for using rough paper or cloth to wipe.
- 3) Clean protection flake occasion: Be not able to scan barcode rightly
- 4) The ways of cleaning protection flake:
  - i) Common maintain ways: Get a piece of clean cotton cloth (or a piece of clean paper) with adding a little liquid (clean water. alcohol) to wipe the transparent flake, note: too much liquid will be easily inleak the inside reader and result in damaging the hardware of reader.
  - ii)Deep maintain ways

a. First, get hold of the middle part of the product in left hand, put right hand into the two sides of rubber sheath and take down gently.

b.Get a piece of clean paper or cotton cloth with adding a little alcohol to swipe gently.

- 2. The reader noumenon
  - If the noumenon is dirty, please get a piece of clean cotton cloth with adding a little liquid (clean water, alcohol)to clean out. Note: Too much liquid will be easily inleak the inside reader and result in damaging the hardware of reader.
  - All parts of the reader noumunon are fixed steadily, but it is quite necessary for users to use it carefully, it will still be damaged if suffered severely impact.
- 3. The reader's connection wire

- The wire includes data transmission and power supply, it is the bridge between reader and host, the connection wire is specially produced for barcode reader, its toughness accords with common usage requirement with fireproofing grade. But please pay attention to the following two points when users operate the reader:
- 1) Two terminals of wire (the reader port connection, the host port connection) are faintish, although the wire is strengthened structurally, users still need to notice: the connection terminals are often folded or pressed, this will result in breaking the inside wires, so the reader can't work normally.
- 2) Two terminals of wire(the reader port connection, the host port connection) are the fixed parts of the wire, Please not pull it forcibly to result in breakage and damage of the wire.