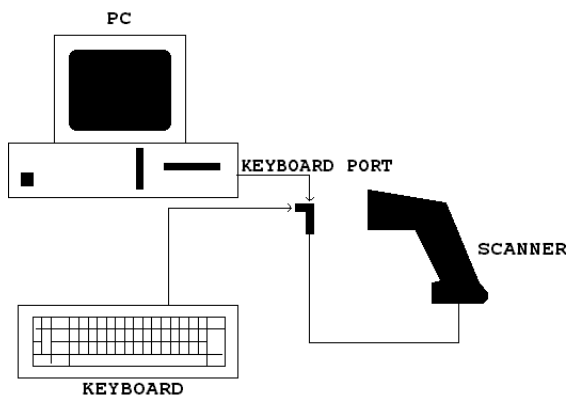
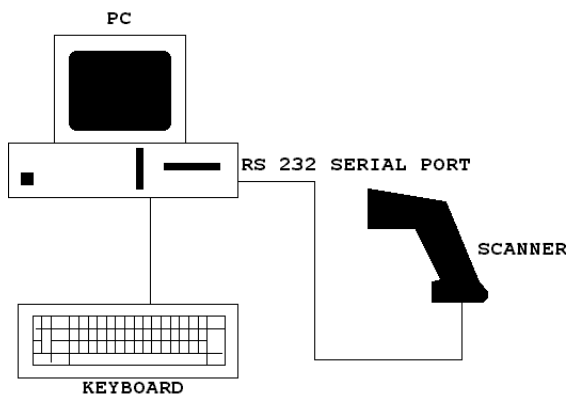
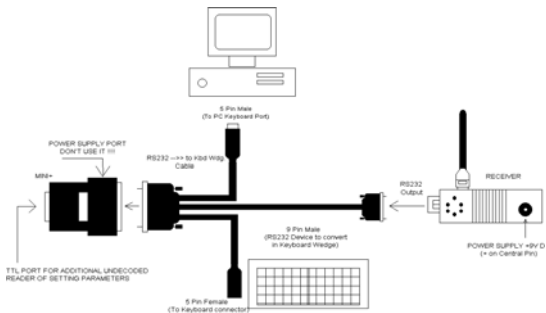
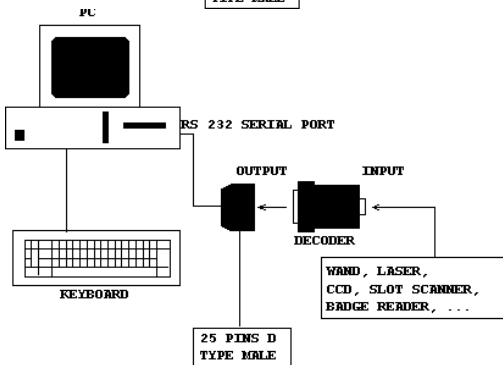
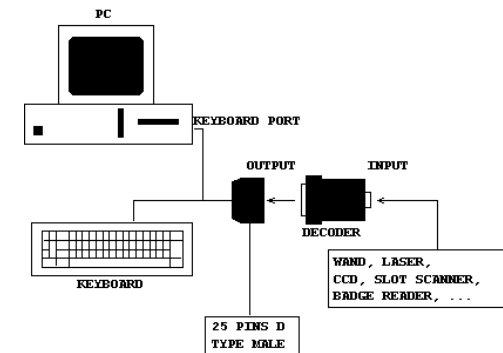


# USER MANUAL

**V 2.2**

## ***INSTALLATION OF YOUR DEVICE***





## **USING THIS MANUAL TO SETUP YOUR DEVICE**

**To set up all the necessary functions you can use the following barcode menus.**

**Using these barcodes, you should enter in program mode, scan the required command symbol then exit from program mode.**

**The general procedure is the following:**

- 1) Scan the command symbol "PROGRAM"**
- 2) Scan one or more parameters**
- 3) Scan the command symbol "END"**

**(note)**

**Code 2/5 symbologies have an unchecked reading mode, so that, you could set a fixed code length to avoid any reading errors.**

**Following is the correct procedure:**

- 1) Scan the command symbol "PROGRAM"**
- 2) Scan the command symbol "FIXED LENGTH"**
- 3) Scan the command symbol "END"**

**The first two scanned barcodes 2/5 will be stored as fixed length values.**

**The following procedure will reset the above selection:**

- 1) Scan the command symbol "PROGRAM"**
- 2) Scan the command symbol "FIXED LENGTH OFF"**
- 3) Scan the command symbol "END"**

## **COMPLEX DEVICE SETTINGS**

**Set MIN/MAX barcode length:**

- 1) Scan the command symbol "PROGRAM"
- 2) Scan the symbol "SET MAX&MIN"
- 3) Scan barcode symbology (i2/5, 39,... etc...)
- 4) Scan the symbol "MM" or "NN" (max or min)
- 5) Scan 2 digits from the ASCII table
- 6) Scan the symbol "SET MAX&MIN"
- 7) Scan the command symbol "END"

**Set PREAMBLE/POSTAMBLE**

- 1) Scan the command symbol "PROGRAM"
- 2) Scan the symbol "PREAMBLE/POSTAMBLE"
- 3) Scan up to 16 characters from the ASCII table
- 4) Scan the symbol "PREAMBLE/POSTAMBLE"
- 5) Scan the command symbol "END"

**Set RS-232 to KEYBOARD WEDGE**

- 1) Scan the command symbol "PROGRAM"
- 2) Scan the symbol "RS-232 TO KB WEDGE"
- 3) Scan the RS-232 parameters (bps, data, parity,...)
- 4) Scan the RX modes
  - a) COUNTER ENABLE(wait for a fixed number of characters to convert the received message)
  - b) CODE ENABLE(wait for an ASCII character as record terminator to convert the received message)
- 5a) Scan the command symbol "COUNTER SET", scan 3 digits from the ASCII table then scan once more the command symbol "CODE SET"
- 5b) Scan the command symbol "CODE SET", scan the characters you want to set as RX message terminator from the ASCII table, then scan once more the command symbol "CODE SET".
- 6) Scan the command symbol "END"

## **COMPATIBLE PRODUCTS:**

*This manual could be used to setup the decoder section of the following EIA products:*

- ***EIA-50***
- ***EIA-55 (all ver.)***
- ***EIA-60 (all ver.)***
- ***EIA-STRIKE (all ver.)***
- ***EIA-800 CCD***
- ***EIA-810 CCD***
- ***EIA-FORCE CCD***
- ***EIA-60RF (all ver.)***
- ***EIA-EAGLE-RF***
- ***EIA-FLS-50L***
- ***EIA-60M***
- ***EIA-STRIKE-M***
- ***EIA-M32K (all ver.)***
- ***EIA-SOLARIS***
- ***EIA-LIGHT***
- ***EIA-BLUESTRIKE***

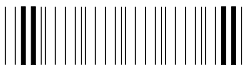
**PARAMETERS SETTING**  
**ENTER/EXIT SETUP**



***PROGRAM***



***DEFAULT***



***END***



***VER. CODE DISABLE***



***VER. CODE ENABLE***

## ***I/O INTERFACE***

### ***Device & Interface Selection***



***KEYBOARD WEDGE\****



***PC/AT***



***PS/2***



***RS-232 SERIAL***



***RS-232 TO KB-WEDGE***



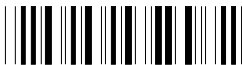
***WAND EMULATION***



***OCIA***



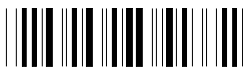
***TX Wand Emulation as  
Code-39***



***TX Wand Emulation as as EAN.  
Scan this code then scan 1,2 or 3  
from the ASCII table to indicate  
the mode you want to use:  
AUTO, EAN-8 or EAN-13 then  
scan this code once more.***



**BARCODE SIMBOLOGY**  
**Symbologies Selection**



**CODE-39 DISABLE**



**CODE-39 ENABLE\***



**FULL ASCII CODE-39\***



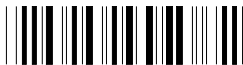
**STANDARD CODE-39**



**CODE-128 DISABLE**



**CODE-128 ENABLE**



**CODE-93 DISABLE**



**CODE-93 ENABLE**



**CODE-32 ENABLE**



**CODE-32 DISABLE**



**ISBN DISABLE**



**ISBN ENABLE**

## ***Symbology Setting (I 2/5)***



***I 2/5 DISABLE***



***I 2/5 ENABLE\****



***FIXED LENGTH ON\****



***FIXED LENGTH OFF***



***1<sup>st</sup> DIGIT SUPPRESS***



***LAST DIGIT SUPPRESS***



***NO DIGIT SUPPRESS\****

## ***Symbology Setting (CODE 128)***



***EAN-128 DISABLE\****



***EAN-128 ENABLE***



***EAN-128 SEPAR. SET***



***CHECK DIGIT DISABLE***



***CHECK DIGIT ENABLE\****

## ***Symbology Setting (S 2/5)***



***S 2/5 DISABLE***



***S 2/5 ENABLE\****



***FIXED LENGTH ON\****



***FIXED LENGTH OFF***



***ADD CHK-DIGIT***



***VERIFY CHK-DIGIT***



***DON'T ADD CHK-DIGIT***

## ***Symbology Setting (UPC-A)***



***UPC-A DISABLE***



***UPC-A ENABLE\****



***LEADING DIGIT SEND\****



***LDNG. DIGIT NOT SENT***



***ADD CHK-DIGIT\****



***DON'T ADD CHK-DIGIT***

## ***Symbology Setting (UPC-E)***



***UPC-E DISABLE***



***UPC-E ENABLE\****



***LEADING DIGIT SEND\****



***LDNG. DIGIT NOT SENT***



***ADD CHK-DIGIT\****



***DON'T ADD CHK-DIGIT***



***ZERO EXP. ENABLE***



***ZERO EXP. DISABLE\****

## ***Symbology Setting (EAN-8)***



***EAN-8 DISABLE***



***EAN-8 ENABLE\****



***LEADING DIGIT SEND\****



***LDNG. DIGIT NOT SENT***



***ADD CHK-DIGIT\****



***DON'T ADD CHK-DIGIT***

## ***Symbology Setting (EAN-13)***



***EAN-13 DISABLE***



***EAN-13 ENABLE\****



***LEADING DIGIT SEND\****



***LDNG. DIGIT NOT SENT***



***ADD CHK-DIGIT\****



***DON'T ADD CHK-DIGIT***



## ***Symbology Setting (EAN/UPC SUPPLEMENTAL)***



***2 DIGIT SUPPL. DISAB.\****



***2 DIGIT SUPPL. ENAB.***



***5 DIGIT SUPPL. DISAB.\****



***5 DIGIT SUPPL. ENAB.***



***SPACE SEPARATOR ON***



***SPACE SEPAR. OFF***



***TRANSMIT IF PRESENT***



***MUST BE PRESENT***

## ***Symbology Setting (CODABAR)***



***CODABAR DISABLE***



***CODABAR ENABLE\****



***START/STOP SEND\****



***START/STOP NOT SENT***

## ***Symbology Setting (MSI)***



***MSI DISABLE***



***MSI ENABLE\****



***DOUBLE MOD 10***



***MOD 11 PLUS MOD 10***



***SINGLE MOD 10***



***SEND***



***NOT SENT\****

## ***Symbology Setting (CODE-11)***



***CODE-11 DISABLE***



***CODE-11 ENABLE\****



***ONE CHECK DIGITS***



***TWO CHECK DIGITS***



***SEND***



***NOT SENT\****

## ***RS-232 SERIAL PARAMETERS***

### ***Baud Rate***



***300***



***1200***



***2400***



***4800***



***9600***



***19200\****



***38400***

## *Parity*



***EVEN***



***ODD***



***MARK***



***SPACE***



***NONE***

## *Data Bits*



***7 BITS\****



***8 BITS\****

## *ACK/NACK protocol*



***OFF\****



***ON***

## ***RS-232 additional parameters***



***CTS/RTS DISABLE\****



***CTS/RTS ENABLE***



***RS-485 ENABLE***



***RS-485 DISABLE\****



***LRC ENABLE***



***LRC DISABLE\****

## **RS-232 TO KBD-WEDGE PARAMETERS**

### **Conversion modes and terminator status**



**COUNTER ENABLE\***



**COUNTER SET  
(01/99 DEFAULT-15)**



**CODE ENABLE**



**CODE SET  
(ASCII CODE 01/7F)**



**TERMINATOR PASS**



**TERMINATOR CUT**

## **DATA FORMAT**

### **Terminators**



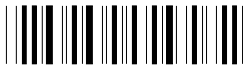
**ENTER (CR+LF)\***



**FIELD-EXIT (CR)**



**RETURN (LF)**



**NONE**



### ***Code-ID***



***NONE\****



***USER DEFINED***



***DEFAULT***

### ***Data Length***



***EXCLUDE\****



***INCLUDE***

### ***Preamble / Postamble***



***PREAMBLE***



***POSTAMBLE***

## ***Define Code-ID***



***DEFINE CODE-ID***



***CODE-39 FULL ASCII***



***CODE-39 STANDARD***



***EAN-13***



***UPC-A***



***EAN-8***



***UPC-E***



***I 2/5***

## *Define Code-ID*



***CODABAR***



***CODE-128***



***CODE-93***



***S 2/5***



***MSI***



***CODE-11***

## ***Custom Code Editing***



***SET EDIT MODE***



***SELECT FROM LEFT***



***SELECT FROM RIGHT***

***Scan SET EDIT MODE, Scan LEFT or RIGHT then scan 2 digits from the ASCII table to select the required length and scan LEFT or RIGHT once more.***



***CUSTOM MODE ENAB.  
(Enable above setting)***



***CUSTOM MODE DISAB.\*  
(Disable above setting)***



***FULL DATA EDIT DISAB  
(Disable following setup)***



***FULL DATA EDIT SETUP***

***Scan FULL DATA EDIT SETUP then scan 2 digits from the ASCII table to select the start position, scan the "." Character and 2 more digits as the required string length, close this procedure by scanning once more the above barcode.***

## **READER FUNCTIONS**

### **Laser ON timeout**



**NONE\***



**SHORT**



**MEDIUM**



**LONG**



**SECURITY LEVEL**  
(Redudancy on decoding)

*Scan the above barcode then scan 1, 2, 3 from the ASCII table to select how many attempt the decoder should do before a good reading, then scan thi barcode once more to close this procedure.*

### ***Beep Tone on decoding***



***NONE***



***LOW***



***MEDIUM\****



***HIGH***

### ***Reading mode***



***Switch mode\****



***Flash mode***



***Repeat mode***

## *Intercharacter delay*



***1 ms \****



***5 ms***



***10 ms***



***20 ms***



***50 ms***



***100 ms***

## *Intermessage delay*



***NONE \****



***50 ms***



***200 ms***



***500 ms***



***1 sec***



***2 sec***



## ***KBD-WEDGE PARAMETERS***

### ***Function codes***



***OFF***



***ON\****

### ***Upper / Lower case***



***LOWER CASE***



***UPPER CASE\****

### ***Num-lock emulation***



***OFF\****



***ON***

## ***Keyboard language***



***USA\****



***U.K.***



***SWISS***



***SWEDISH***



***SPANISH***



***NORWEGIAN***



***ITALIAN***



***GERMAN***



***FRENCH***

## **BARCODE LENGTH PARAMETER**

**Barcode Fixed length**



**SET MAX&MIN**



**CODE-39 (1-64)**



**I 2/5 (4-64)**



**S 2/5 (4-64)**



**CODE-128 (4-64)**



**MSI (4-16)**



**CODE-93 (4-64)**



**CODE-11 (4-64)**



**CODABAR (4-64)**



**MAX ( MM )**



**MIN ( NN )**

## ASCII TABLE



!



H



#



\$



%



&



,



)



(



\*



+



,



-



.



/



0



1



2



3



4

## ASCII TABLE



5



6



7



8



9



:



;



<



=



>



?



@



A



B



C



D



E



F



G



H



I



J

## ASCII TABLE



K



L



M



N



O



P



Q



R



S



T



U



V



W



X



Y



Z



[



\



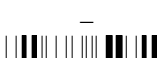
]



^



\_



`

## ASCII TABLE

a

b

**C**

d

e

**f**

g

h

1

J

K

1

m

n

O

p

q

**r**

**S**

t

**00000000000000000000000000000000**

u

V

## ASCII TABLE



w



x



y



z



{



|



}



~



DEL



NUL



SOH



STX



ETX



EOT



ENQ



ACK



BEL



BS



HT



LF



VT



FF



## ASCII TABLE



CR



SO



SI



DLE



DC1



DC2



DC3



DC4



NAK



SYN



ETB



CAN



EM



SUB



ESC



FS



GS



RS



US



SP

## ASCII TABLE



F1



F2



F3



F4



F5



F6



F7



F8



F9



F10



F11



F12



HOME



END



CURSOR RIGHT



CURSOR LEFT



CURSOR UP



CURSOR DOWN



PAGE UP



PAGE DOWN



TAB



BACK TAB



ESC



ENTER



RIGHT CTRL

## **BLUETOOTH PARAMETER SETTING**

(for BlueStrike model only)

Always read "Program" before enter the following parameters.

Read "End" when ALL your selections are terminated



**PROGRAM**

---

### **RESET DEFAULT RADIO PARAMETERS**



- ***PIN = 11111111***
  - ***Peer Address = ff:ff:ff:ff:ff:ff***
  - ***Role= Slave***
  - ***Protocol = not used***
  - ***Data retry times=6 times (only with protocol)***
  - ***SPP Param = 19200,N,8,1***
  - ***Discoverable=Yes***
  - ***Device Name = EIA BARCODE 00***
- 



**END**

### ***Set PIN CODE by Digits***



Scan this barcode then scan **8** valid digits from the ascii table then scan once more this barcode to close the PIN CODE programming

### ***Set PEER ADDRESS by Digits***



Scan this barcode then scan **12** valid digits from the ascii table then scan once more this barcode to close the PEER ADDRESS programming

### ***Set Role as MASTER***



Scan this barcode to set the scanner as **MASTER**

Note : in this way the Scanner is not discoverable by USB dongles and try to reconnect automatically his own Peer address using the same PIN code.

### ***Set Role as SLAVE***



Scan this barcode to set the scanner as **SLAVE**

Note : in this way it can be connected by any USB dongle but if the Peeraddress remain ff:ff:ff:ff:ff:ff it will always ask for PIN code al the times he reconnect.

Set the Dongle Peer address to avoid further PIN requests after the first pairing

### ***Set PEER ADDRESS by single Barcode***



Scan this barcode then scan a single barcode of 12 valid digits indicating the Peer address

### ***Set PIN CODE by single Barcode***



Scan this barcode then scan a single barcode of 8 valid digits indicating the PIN CODE

### ***Set 2 Ways Protocol enabled***



Scan this barcode to select the 2 ways protocol

Note : In this way, the scanner transmit (the retry times programmed) and wait for a host feedback. Once received, an additional good-feedback BEEP will be emitted indicating the barcode is correctly received from host. In case the host don't acknowledge, an error-BEEP is emitted indicating that barcode couldn't be received.

IN THE CD THERE IS A SOFTWARE THAT USE THIS SECURE  
PROTOCOL AND TRANSFORM DATA RECEIVED IN  
KEYBOARD WEDGE OUTPUT

### ***Set 2 Ways Protocol Disabled***



Scan this barcode to disable the 2 ways protocol

Note : In this way, the scanner just transmit the captured barcode and don't wait a host acknowledgement.

### **IN THE CD THERE IS A SOFTWARE THAT CAN TRANSFORM DATA RECEIVED IN KEYBOARD WEDGE OUTPUT**

Using this software without protocol set on the scanner, remember to uncheck the related RADIO-ACK options on the software setting.

### ***Set Data Retry times (works with protocol only)***



Scan this barcode then scan **2** valid digits from the ascii table to compose how many retransmissions then scanner will perform (up to 255) in case the host ack is not received, then scan once more this barcode to close the programming

### ***Set DEVICE NAME***



Scan this barcode then scan **2** valid digits from the ascii table then scan once more this barcode to close the programming.

Device name will be EIA BARCODEXX where XX are the 2 digits set by user.

## **BLUETOOTH WORKING MODES**

EIA BlueStrike can be connected by USB Bluetooth dongles, EIA RS232 dongle or any other device having Serial Port Profile with ascii protocol.

It can work in 4 different modes.

- Slave without 2 ways Protocol
- Slave with 2 ways Protocol
- Master without 2 ways Protocol
- Master with 2 ways Protocol

In MASTER mode BlueStrike will try to automatically reconnect his slave device, so be sure to setup the remote device MAC ADDRESS like local PEER ADDRESS, as well the BlueStrike PIN CODE should be set to match the remote device PIN CODE.

If a pairing is created in this way, the connection will be automatically created all the time the Bluestrike powerON after a power-down.

In MASTER mode the BlueStrike is NOT DISCOVERABLE by other bluetooth devices.

In SLAVE mode the BlueStrike is DISCOVERABLE and wait for a connection from a MASTER device.

Normally the connection is terminated once the BlueStrike power-down after 3 minutes of inactivity.

If the remote device can act as MASTER (like EIA RS232 receiver) it should be able to automatically reconnect the Scanner that was paired, as soon as it power-on again.

Not all USB dongles have this automatic connection feature, so in that case you should set the BlueStrike as MASTER.

To be sure that BlueStrike will be paired without asking all the time the PIN CODE, the USB dongle (or other MASTER device) MAC ADDRESS should be set like local PEER ADDRESS.

Default PEER ADDRESS in BlueStrike is ff:ff:ff:ff:ff:ff, this allow a connection, but in this situation the PIN CODE will be required all the time and a automatic pairing will be impossible.

If the PEER ADDRESS is different from ff:ff:ff:ff:ff:ff (or even better, the MASTER device MAC ADDRESS) the BlueStrike will not allow to be connected.

In 2 WAYS PROTOCOL mode, the strike will transmit the captured barcode string, up to the RETRY TIMES number set, untill an ACK answer is received from host.

This allow the user to move safely many meters far from the PC (Blue Strke can communicate to CLASS 1 dongles up to 100 meters) being sure that bluetooth connection is still active and the barcode transmitted is correctly received from the host.

Blue Strike read a barcode, it transmit to host, wait for the host ACK, and once received, play additional 2 Beep to indicate a GOOD-FEEDBACK.

If the Host don't ACKnowledge the BlueStrike retry up to the times setup, then give an error message by 4 Beeps.

While the BlueStrike is RE-transmitting (and waiting for the ACK) the LED flash Green/Red and the Laser is Disabled to prevent any other scans.

Working with Strike in MASTER MODE and PROTOCOL also indicate (with a good feedback BEEP) the use once the Bluetooth connection is established, even if the host is many meters far.

To work with protocol, is necessary that host will be able to send back to Scanner by the Virtual-Serial-Port (BT serial port) an ACK string, so a specific software should be written by the user.

To simplify, a software utility is included in the CD-ROM that allow the use of Software in the mean time it convert the barcode received in KEYBOARD\_WEDGE strings



This allow the user to receive in highly-safe way (protocol) all barcode scanned in any existing application, like they have been typed on the keyboard... even if they come from USB or RS232 dogles.

Without 2 WAYS PROTOCOL mode, the BlueStrike will transmit the captured barcode string to the host without any control

So the user should take care that Bluetooth connection is active and the program is receiving correctly the scanned barcodes.

The WEDGE software Utility could be used even in this mode to convert string in Keyboard wedge, but all the PROTOCOL options (RADIO ACK) must be disabled.

SLAVE witout 2 WAYS PROTOCOL, this is surely the easiest way to setup the scanner (default) but as well as the most unsecure unless the user will work around the Host area.

We strongly suggest to use CLASS 1 Bluetooth Dongles or EIA RS232 dongle to create connetcions between the BlueStrike and a PC.