

ToughRunners / ScanWear Programming Guide

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Revision History

Changes to the original manual are listed below.

Document	Date	Description
1.0	14 May. 09	Initial release
1.1	20 May. 09	Add config barcodes (Enable/Disable) for the RSS Symbologies
1.2	01 Dec 09	Remove 120min Shutdown timer barcode

Introduction

The ScanWear & ToughRunners scanners (firmware version min: v4.00.06) can be programmed by scanning barcode labels which contain commands for the decoder.

Programming labels must be Code128, with specific starting and ending characters. These labels will always be read, even if Code128 symbology is disabled.

The scanner will acknowledge a good and valid programming barcode label reading with one beep and a blue enlightening of the led.

Please do not read the programming barcodes while being connected to the BaracodaManager software.

Programmable options are divided into 2 groups. The first group includes the options that show the general behaviour of the scanner. The second group sets the decoding parameters for each barcode symbology.

This document concerns the ScanWear & ToughRunners scanners.

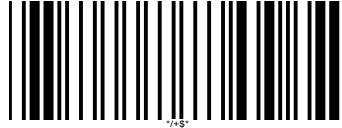
All our documentations can be downloaded from the Partners download section of Baracoda website (registration is required):

<http://www.baracoda.com>

1. General configuration

1.1. Reset all parameters

Barcode title	Reset to factory settings
Description	Reset the scanner to the factory default settings



1.2. Shutdown timer

Barcode title	Set Shutdown timer to default value (*)
Description	Set Shutdown timer to default value

20mn = 1200 sec

@3\000\000\042\002\004@4\048



Barcode title	Set Shutdown timer to a XXX minute value
Description	Set Shutdown timer to a XXX minute value

10mn = 600 sec

@3\000\000\042\002\002\088



40mn = 2400 sec

@3\000\000\042\002\009@B\096



1h = 60mn = 3600 sec

@3\000\000\042\002\014\016



1.3. Baracoda header & No data loss mode

Barcode title	Enable "No Data loss mode"
Description	Activate the Baracoda header + activation of "No Data Loss Mode"

@3\000\000@4\064\001\001



Barcode title	Disable "No Data loss mode"
Description	Activate the Baracoda header + disable of "No Data Loss Mode"

@3\000\000@4\064\001\000



Barcode title	Disable Baracoda header + "No Data Loss mode" OFF (*)
Description	Activate the 'raw' mode

@3\000\000@4\064\001\002



1.4. Reading mode

Barcode title	Enable Manual AutoScan mode
Description	Enable Manual Autoscan mode

@3\004\000\029\003255



Barcode title	Disable Manual AutoScan mode (*)
Description	Enable trigger mode by default

@3\004\000\029\003003



Barcode title	Enable Motion sensor mode (*) - Only for ScanWear
Description	Enable Motion sensor mode

@3\000\000\051\001\001



Barcode title	Disable Motion sensor mode - Only for ScanWear
Description	Disable Motion sensor mode

@3\000\000\051\001\000



Barcode title	Motion sensor mode - Wrist motion easy (*) - Only for ScanWear
Description	Configure the Motion sensor to Easy movement detection.

@3\000\000\069\001\049



Barcode title	Motion sensor mode - Wrist motion medium - Only for ScanWear
Description	Configure the Motion sensor to medium movement detection

@3\000\000\069\001\048



Barcode title	Motion sensor mode - Wrist motion hard - Only for ScanWear
Description	Configure the Motion sensor to hard movement detection

@3\000\000\069\001\050



Barcode title	Enable Anti-duplicate scan
Description	Enable Anti-duplicate scan Note: Not applicable when the scanner is in Trigger mode

@3\001\000\053\001@4\000



Barcode title	Disable Anti-duplicate scan
Description	Disable Anti-duplicate scan Note: Not applicable when the scanner is in Trigger mode

@3\002\000\053\001@4\000



1.5. Generic settings

Barcode title	Disable vibrator
Description	Disable vibrator

@3\000\000\058\003\000\000\000



Barcode title	Enable vibrator (*)
Description	Enable vibrator

@3\000\000\058\003\010\010\010



Barcode title	Disable buzzer
Description	Disable read & ack beeps

@3\000\000@B@4\110@A\001\003



Barcode title	Enable buzzer (*)
Description	Enable read & ack beeps

@3\000\000@B@4\110@A\001\000



1.6. Bluetooth settings

Barcode title	Put Bluetooth in class 1(*)
Description	Configure power emission at ~20dBm

@3\000\006\048\002\000\020



Barcode title	Put Bluetooth in class 2
Description	Configure power emission at ~10dBm

@3\000\006\048\002\000\005



Barcode title	Disable Bluetooth security
Description	Remove all security schema

@3\000\006\067\001\000



Barcode title	Enable Bluetooth security (*)
Description	Activate Bluetooth security

@3\000\006\067\001\001



1.7. Global Prefix/Suffix settings

Barcode title	Set & configure Prefix value
Description	Set & Configure Prefix value

Start Prefix configuration

@3\003\000\070\032



And scan the prefix value (1 à 32 characters max) – see Appendix 1

End of configuration

@3\000



Barcode title	Disable Prefix (*)
Description	Remove prefix data

@3\003\000\070\001\000



Barcode title	Set & Configure Suffix value
Description	Set & Configure Suffix value

Start Suffix configuration

@3\003\000@B\103@A\032



And scan the suffix value (1 à 32 characters max) – see Appendix 1

End of configuration

@3\000



Barcode title	Disable Suffix (*)
Description	Remove Suffix data

@3\003\000@B\103@A\001\000



2. Decoder configuration

2.1. Symbology Identifier

Barcode title	Symbology identifier - AIM - not transmitted (*)
Description	-

@3\000\000@4\063\001\000



Barcode title	Symbology identifier - AIM -transmitted
Description	-

@3\000\000@4\063\001\001



2.2. CODABAR configuration

Barcode title	Disable Codabar symbology
Description	-

@3\002\000\000\001\016



Barcode title	Enable Codabar symbology (*)
Description	-

@3\001\000\000\001\016



2.3. CODE39 configuration

Barcode title	Disable code39 symbology
Description	-

@3\002\000\000\001@4\000



Barcode title	Enable code39 symbology (*)
Description	-

@3\001\000\000\001@4\000



2.4. CODE93 configuration

Barcode title	Disable code93 symbology
Description	-

@3\002\000\001\001@4\000



Barcode title	Enable code93 symbology (*)
Description	-

@3\001\000\001\001@4\000



2.5. CODE128/EAN128 configuration

Barcode title	Disable Code128/EAN128 symbology
Description	-

@3\002\000\000\002\004\016



Barcode title	Enable Code128/EAN128 symbology (*)
Description	-

@3\001\000\000\002\004\016



Barcode title	Enable EAN128 GS transmission
Description	-

@3\001\000\016\001@4\000



Barcode title	Disable EAN128 GS transmission (*)
Description	-

@3\002\000\016\001@4\000



Barcode title	Replace EAN128 GS by another character value [scan 1 character from table]
Description	-

Start EAN128 GS modification

@3\000\000\016\001



And scan the new GS value – see Appendix 1

End of configuration

@3\001\000\016\001@4\000



2.6. I2of5 configuration

Barcode title	Disable I2of5 symbology (*)
Description	-

@3\002\000\000\001\064



Barcode title	Enable I2of5 symbology
Description	-

@3\001\000\000\001\064



2.7. S2of5 configuration

Barcode title	Disable S2of5 symbology (*)
Description	-

@3\002\000\000\001\008



Barcode title	Enable S2of5 symbology
Description	-

@3\001\000\000\001\008



2.8. MSI configuration

Barcode title	Disable MSI symbology (*)
Description	-

@3\002\000\000\001\002



Barcode title	Enable MSI symbology
Description	-

@3\001\000\000\001\002



2.9. EAN13/EAN8/UPC-A/UPC-E configuration

Barcode title	Disable EAN13/EAN8/UPC-A/UPC-E symbology
Description	-

@3\002\000\000\001\032



Barcode title	Enable EAN13/EAN8/UPC-A/UPC-E symbology (*)
Description	-

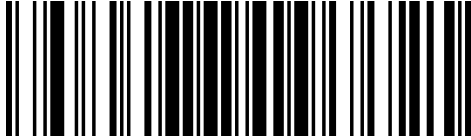
@3\001\000\000\001\032



2.10. Code GS1 Databar (RSS) 14 configuration

Barcode title	Disable Code GS1 Databar (RSS) 14
Description	Function only compatible with ScanWear Laser, ToughRunners Laser, and ToughRunners Laser Long Range

@3\002\000@B@4\113@A\001\001



Barcode title	Enable Code GS1 Databar (RSS) 14 (*)
Description	Function only compatible with ScanWear Laser, ToughRunners Laser, and ToughRunners Laser Long Range

@3\001\000@B@4\113@A\001\001



Barcode title	Force AIM prefix on (RSS) 14 "je0"
Description	-

@3\001\000@B@4\113@A\001\002



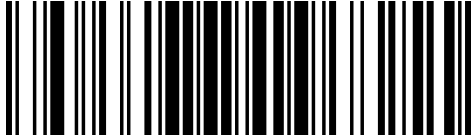
Barcode title	Disable AIM prefix on (RSS) 14 "je0"
Description	-

@3\002\000@B@4\113@A\001\002



Barcode title	Force UCC/EAN128 emulation prefix on (RSS) 14 "J1"
Description	-

@3\001\000@B@4\113@A\001\004



Barcode title	Disable UCC/EAN128 emulation prefix on (RSS) 14 "J1"
Description	-

@3\002\000@B@4\113@A\001\004



Barcode title	Enable AI prefix "01"
Description	-

@3\001\000@B@4\113@A\001\008



Barcode title	Disable AI prefix "01"
Description	-

@3\002\000@B@4\113@A\001\008



Barcode title	Enable checksum MOD10 suffix
Description	-

@3\001\000@B@4\113@A\001\016



Barcode title	Disable checksum MOD10 suffix
Description	-

@3\002\000@B@4\113@A\001\016



2.11. Code GS1 Databar (RSS) Limited configuration

Barcode title	Disable Code GS1 Databar (RSS) Limited
Description	Function only compatible with ScanWear Laser, ToughRunners Laser, and ToughRunners Laser Long Range

@3\002\000@B@4\114@A\001\001



Barcode title	Enable Code GS1 Databar (RSS) Limited (*)
Description	Function only compatible with ScanWear Laser, ToughRunners Laser, and ToughRunners Laser Long Range

@3\001\000@B@4\114@A\001\001



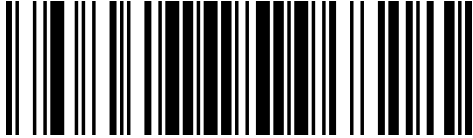
Barcode title	Force AIM prefix on (RSS) Limited "je0"
Description	-

@3\001\000@B@4\114@A\001\002



Barcode title	Disable AIM prefix on (RSS) Limited "je0"
Description	-

@3\002\000@B@4\114@A\001\002



Barcode title	Force UCC/EAN128 emulation prefix on (RSS) Limited "jC1"
Description	-

@3\001\000@B@4\114@A\001\004



Barcode title	Disable UCC/EAN128 emulation prefix on (RSS) Limited "jC1"
Description	-

@3\002\000@B@4\114@A\001\004



Barcode title	Enable AI prefix "01"
Description	-

@3\001\000@B@4\114@A\001\008



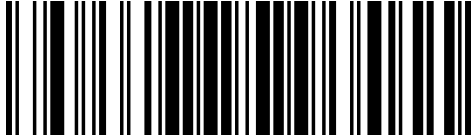
Barcode title	Disable AI prefix "01"
Description	-

@3\002\000@B@4\114@A\001\008



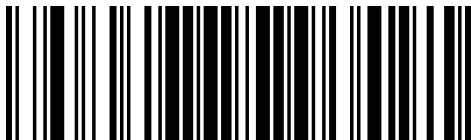
Barcode title	Enable checksum MOD10 suffix
Description	-

@3\001\000@B@4\114@A\001\016



Barcode title	Disable checksum MOD10 suffix
Description	-

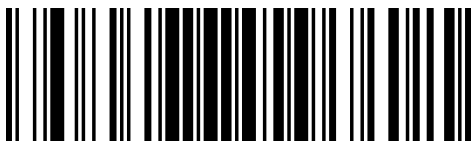
@3\002\000@B@4\114@A\001\016



2.12. Code GS1 Databar (RSS) Expanded configuration

Barcode title	Disable Code GS1 Databar (RSS) Expanded
Description	Function only compatible with ScanWear Laser, ToughRunners Laser, and ToughRunners Laser Long Range

@3\001\000@B@4\115@A\001\001



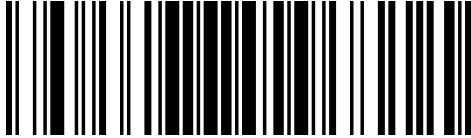
Barcode title	Enable Code GS1 Databar (RSS) Expanded (*)
Description	Function only compatible with ScanWear Laser, ToughRunners Laser, and ToughRunners Laser Long Range

@3\002\000@B@4\115@A\001\001



Barcode title	Force AIM prefix on (RSS) Expanded "e0"
Description	-

@3\001\000@B@4\115@A\001\002



Barcode title	Disable AIM prefix on (RSS) Expanded "e0"
Description	-

@3\002\000@B@4\115@A\001\002



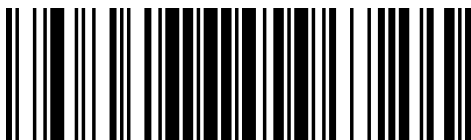
Barcode title	Force UCC/EAN128 emulation prefix on (RSS) Expanded "C1"
Description	-

@3\001\000@B@4\115@A\001\004



Barcode title	Disable UCC/EAN128 emulation prefix on (RSS) Expanded "C1"
Description	-

@3\002\000@B@4\115@A\001\004



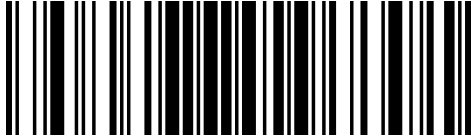
Barcode title	Enable AI prefix "01"
Description	-

@3\001\000@B@4\115@A\001\008



Barcode title	Disable AI prefix "01"
Description	-

@3\002\000@B@4\115@A\001\008



Barcode title	Enable checksum MOD10 suffix
Description	-

@3\001\000@B@4\115@A\001\016



Barcode title	Disable checksum MOD10 suffix
Description	-








@3\002\000@B@4\115@A\001\016









APPENDIX 1: ASCII Table (A-Z, a-z, 0-9, punctuation, Control characters)

Capital letters (A-Z):








Name	Programming label
A	 A
B	 B
C	 C
D	 D
E	 E
F	 F
G	 G








Name	Programming label
N	 N
O	 O
P	 P
Q	 Q
R	 R
S	 S
T	 T







H	 H
I	 I
J	 J
K	 K
L	 L
M	 M







U	 U
V	 V
W	 W
X	 X
Y	 Y
Z	 Z

Small letters (a-z):












Name	Programming label
a	 a
b	 b
c	 c
d	 d
e	 e
f	 f
g	 g








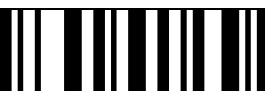



Name	Programming label
n	 n
o	 o
p	 p
q	 q
r	 r
s	 s
t	 t










h	 h
i	 i
j	 j
k	 k
l	 l
m	 m

u	 u
v	 v
w	 w
x	 x
y	 y
z	 z








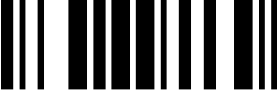


Ponctuation:

Space	<p style="text-align: center;">space</p> 
!	 <p style="text-align: center;">!</p>
"	 <p style="text-align: center;">"</p>
#	 <p style="text-align: center;">#</p>
\$	 <p style="text-align: center;">\$</p>
%	 <p style="text-align: center;">%</p>
&	 <p style="text-align: center;">&</p>
,	 <p style="text-align: center;">,</p>
( <p style="text-align: center;">(</p>
)	 <p style="text-align: center;">)</p>
*	 <p style="text-align: center;">*</p>

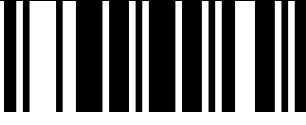





+	 +
,	 ,
-	 -
.	 .
/	 /
:	 :
;	 ;
<	 <
=	 =
>	 >
?	 ?

@	 @
[ [
]	]
^	 ^
-	 -
{	 {
	
}	 }
~	 ~

Decimal numbers (0-9):

Name	Programming label
0	 0
1	 1
2	 2
3	 3
4	 4
5	 5
6	 6
7	 7
8	 8
9	 9

Control Characters:

Name	Programming label
CR	
EOT	
ETX	
LF	
SOH	
STX	
HORIZONTAL TAB	