Model V500-R521-B2/R521C2 Menu Sheet

9048275-5A

■About Menu Sheet

This manual shows the way and procedure to set the condition of the bar-code reader by using the Menu Bar Code.
Please refer to the User's Manual, when setting by the command from the host machin.
The default setting is marked (*) in this sheet.
Please change the settings according to the procedure of this sheet, when changing the settings.

■Bar Code Label

1.The height of the bar code should be more than the luster scan width (max. 10 mm) and use a label considering attaching error.

2. When reading bar code, margin is necessary on the both sides of the bar code. Set the label so that margin parts do not hide. A space of one character or more and 2.5 mm or more is necessary of both right and left side of the label. (Rough standard: 12 or 13 times or more of the narrow bar width)

■To improve reading reliability

In the default settings, it is possible to read various kind of the bar-code and the number of digits is not fixed.
The following settings are recommended in order to increase the reliability for reading.

(1) Bar codes other than the reading object should be set to reading prohibition.
(2) When the digit is determined, designate the digit to use the bar code.
(3) Use the modulus check (addition of check digit).
(4) Please set Redundancy to 2 times over.

■Mutual Interference

When mounting the bar code readers side-by-side, laser beams may interfere reading each other. The bar code readers should be placed far enough not to affect reading.

■Timing input with photo-electronic sensor

When taking timing with the photo-electronic sensor, mount the bar code reader so that the footlight beam of the photo-electronic sensor does not spot directly on the reading window of the bar code reader or on the bar code.

■Influence of reflective objects

When there is any reflective object such as metal or mirror surface on the bar code beam-scanning surface, reading character may be deteriorate. Cover the reflective object with something or change the bar code position to avoid influence.

■Procedure for setting

(1) Turn on the power for the bar-code reader
(2) Push on the test button of the rear panel and read the following label ([Z7]) at first.

SET/END Label
Z 7

(3) The buzzer sounds periodically when [Z7] label can be read correctly at first.
(4) The bar-codes to apply each settings are printed in this sheet. Read the proper bar-code. The buzzer sounds when the label can be read correctly.
(5) Read [Z7] label again, when finishing the change of the settings.
The changed settings are registered to EEPROM and it is possible to use in the new settings, after reading [Z7] label.
The changed settings are not registered to EEPROM when turning off before reading [Z7] label. Therefore, the settings without the change runs when turning on at next time.

◎Procedure to make the default settings back

Read the following label [UA], after reading [Z7] label. The buzzer sounds when it can be read correctly. After then, it is possible to make the all settings default, when reading [Z7] label again. All settings return the default value (marking : *).

Factory default setting
U A

■Default Settings

Item		Settings
Types of code, which is possible to read		EAN/UPC,CODE39, NW-7,STF,ITF
Number of reading digits		No designatede number of digits
Detailed Settings	CODE-39	Disable CODE-39 CD Transmission
		Enable CODE-39 CD Transmission
		Enable CODE-39 ST/SP Transmission
	NW-7	Disable NW-7 CD Transmission
		Enable NW-7 CD Transmission
		Enable NW-7 ST/SP Transmission (abcd/abcd)
	lITF/ST	Disable ITF/ST CD Transmission
		Enable ITF/ST CD Transmission
Scan Method	Trigger Manual Scan	Enabled (Normally use trigger switch)
	Single / Multiple Read	Single Read
	Read Time	Press Trigger + 2 seconds
	Number of reading coincidence	Twice (Verification : once)
	Check Method	AND Redundancy
Commu-nication Condition	Communication Rate	9600bps
	Data Length	8 bits
	Parity	No Parity
	Stop Bit	1 bits
Commu-nication Settings	Header	N/A
	Footer	CR
	Transmit Length	Disabled
	RTS/CTS Control	Disabled
	CTS Wait Time	No Limit
	Communication Protocol	No Protocol Mode
	Unsuccessful Read	No Transmission
LED Duration		200 ms after decoding
Buzzer Duration		200 ms after decoding
Buzzer Loudness		Loud
Buzzer Tone		3 KHz, 2 KHz
Trigger Signal Level		L-active
OK/NG Signal Output		Enabled
OK/NG Signal Output Method		Trigger Synchronization, H-active
Motor Control		All time ON (No motor control)
Contrast		Positive Contrast
Laser Check		No Check
Motor Check		No Check

■Menu Bar Code

1. Reading Setting

Function	Menu Sheet
(*) UPC-A/E Enable	R 1
(*) EAN13/8 Enable	R 4
EAN/UPC Disable	4 A
(*) CODE39 Enable	B 2
CODE39 Disable	4 H
(*) NW-7 Enable	B 3
(*) NW-7 Disable	4 I
(*)ITF Enable	R 8
lITF Disable	4 L
(*) STF Enable	R 7
STF Disable	4 K
CODE93 Enable	B 5
(*) CODE93 Disable	4 M
CODE128 (including EAN128) Enable	B 6
(*) CODE128 (including EAN128) Disable	4 N

2. Reading Digits

Function	Menu Sheet
(*) Number of digit is not designated.	H 0
Designation of number of digit A (Bar code reading system) (Note:1)	H 1
Designation of number of digit B (Bar code reading system) (Note:1)	H 4

Note 1) It is possible to set 2 kinds of reading digits (A and B). After reading this menu sheet, read the bar code of the number of digit you want to register twice, continuously. When the number of digit is one type, set A and B to the same setting.

3. Detail Settings

Item	Function	Menu Sheet
Detail for UPC-A	(*) Leading zero, transmit CD	E 2
	No leading zero, transmit CD	E 3
	Leading zero, not transmit CD	E 4
	No leading zero, not transmit CD	E 5
Detail for UPC-E	Leading digit, transmit CD	E 6
	No leading digit, transmit CD	E 7
	(*)Leading digit, not transmit CD	E 8
	No leading digit, not transmit CD	E 9
Detail for CODE39	(*) Not check CD	C 0
	Check CD	C 1
	Transmit CD	C 2
	Not transmit CD	C 3
	Not transmit ST/SP	D 0
	(*) Transmit ST/SP	D 1
Detail for NW-7	(*) Not check CD	F 7
	Check CD (Modulus 16)	F 9
	(*) Transmit CD	F 5
	Not transmit CD	F 6
	Not transmit ST/SP	F 0
	Transmit ST/SP (ABCD/ABCD)	F 3
	(*) Transmit ST/SP (abce/abcd)	F 4
Detail for ITF/STF	(*) Not check CD	G 0
	Check CD	G 1
	(*) Transmit CD	G 2
	Not transmit CD	G 3

4. Condition for Scanning

Item	Function	Menu Sheet
Scanning Trigger	Disable trigger	
	(*)Enable trigger	
Scanning Operation	(*) Single read	
	Multiple read	
	Continuous read	
Read Effective Time	0 seconds (while turning Trigger Signal)	
	Trigger + 1 second	
	Trigger + 2 seconds	
	Trigger + 3 seconds	
	Trigger + 4 seconds	
Reading conformance	(*) Read 2 times (Verification: once)	
	Read 3 times (Verification: 2 times)	
	Read 4 times (Verification: 3 times)	
	Read 5 times (Verification: 4 times)	
Response for Unsuccessful Read	No response	
	Transmit BR[CR]	
	Transmit [STX]?[ETX], [STX]>[ETX] (Note:2)	
	Transmit ?[CR], >[CR] (Note:2)	
	Transmit [CAN][CR]	
	Transmit [STX] [CAN] [ETX]	

Note:2) No bar-code : ?
Other : >

5. Communication Conditions

Item	Function	Menu Sheet
Baud Rate	1200bps	
	2400bps	
	4800bps	
	(*) 9600 bps	
	19200bps	
	38400bps	
Data Length	7 bits	
	(*) 8 bits	
Parity	(*)No parity	
	Even parity	
	Odd parity	
Stop Bit	(*) 1 bit	
	2 bits	

6. Communication Settings

Item	Function	Menu Sheet
Header	Prefix : All Codes (Note:3)	
	Set STX (02H)	
Footer	Suffix : All Codes (Note:3)	
	Set ETX (03H)	
	Set CR (0DH)	
	Set LF (0AH)	

Note 3) Please read the code of Header and Footer to add on the Users Manual.
Header : Non ···1Y + (No setting)
Header : STX ···1Y + 1A
Footer : CR····1Z + 1C

Item	Function	Menu Sheet
Transmit Length	(*) Disable : All Codes	
	Enable : All Codes	
RTS/CTS Control	(*) Disable	
	Enable (BUSY/READY)	
CTS Wait Time	(*) No limit	
	100ms	
	200ms	
	400ms	
Commu-nication Protocol	ACK/NAK Mode	
	(*) No Protocol Mode	
ACK/NCK Wait Time	(*) No limit	
	100ms	
	500ms	
	1000ms	

7. External Trigger Input SIgnal

Function	Menu Sheet
Active High	
(*) Active Low	

Note.4) Logic of external trigger signal can be selected as follows.

Positive logic (HIGH active)	Trigger ON
Negative logic (LOW active)	Trigger ON

8. READ OK/NG Output Signal

Function	Menu Sheet
(*) Enable Sequence output	
Disable Sequence output	

9. READ OK/NG Output Signal Method

Function	Menu Sheet
(*) Trigger Synchronization, H-Active	
Trigger Synchronization, L-Active	
One shot, H-Active	
One Shot, L-Active	
One Shot (10 ms)	
One Shot (20 ms)	
One Shot (30 ms)	
One Shot (40ms)	
One Shot (80ms)	
One Shot (100 ms)	

Note 5) You can select the output logic of READ OK and READ NG signal.

Function	Menu Sheet
Trigger Synchronization	Maintains ON condition until the next trigger is input. You can select positive logic/negative logic.
One shot	READ OK/NG signal is turned on during the preset time (one-shot time). One-shot time can be set from 10 to 100 ms (in 10 ms interval). You can select positive logic/negative logic.