# Manual

# QR & Aztec Scanner with Docking Station, WIFI & Bluetooth

## HD-SL96

HDWR
Hardware for business

# Table of contents

## Specifications:

- **Warranty:** 2 years
- **Material:** ABS+TPU
- **Light Source:** CMOS Sensor
- **Resolution:** 640 x 480 px
- **Scan Method:** Manual (On Button) / Automatic (When Code Is Zoomed In)
- **Scan Notification:** Light and Sound Signal
- **Wireless Communication:** 2.4GHz Radio, Bluetooth HID, Bluetooth SPP, Bluetooth BLE
- **Wireless Communication Range:** Up to 150 m (Radio), Up to 10 m (Bluetooth)
- **Interface:** USB, Virtual COM
- **Cooperation with cash registers:** Novitus Santo Lan E
- **Cord length:** 160 cm
- **Battery capacity:** 2200mAh
- **Charging Time:** 4.5 hours
- **Standby Time:** 6 months
- **Maximum working time:** 16 hours
- **Protection Grade:** IP54
- **Drop Resistance:** 1.5m
- **Dimensions of the device: 16.3 x 6.8 x 8 cm**
- **Docking Station Dimensions:** 9.2 x 7.3 x 3.5 cm
- **Package dimensions:** 10.5 x 8 x 24 cm
- **Set weight:** 400 g
- **Weight with packaging:** 490 g
- **Operating temperature:** 0 - 50°C
- **Storage Temperature:** -40 - 70°C
- **Operating humidity:** 5 - 95%
- **1D Codes Read:** Codabar, Code 11, Code 39, Code 32, Interleaved 2 of 5 (ITF), Industrial 2 of 5, Matrix 2 of 5, Code 93, Code 128, GS1-128, UPC-A, UPC-E, EAN-8, EAN-13, GS1

DataBar (RSS14), GS1 DataBar Limited, GS1 DataBar Expanded

- **2D Readable Codes:** PDF417, Micro PDF417, Data Matrix, QR Code, MicroQR, Aztec

## Kit contents:

- Wireless Barcode Reader
- Docking station with dedicated USB cable
- Manual

## Main Control Codes

| | |
|---|---|
|  <br>Software Version |  <br>Restore to Settings Factory |

## Data transfer modes

| | |
|---|---|
|  <br>Real-world mode<br>**Remark!** The scanned codes will be sent to the target device immediately. |  <br>Storage mode<br>**Remark!** The scanned codes will be stored in the built-in memory. |
|  <br>Automatic storage mode<br>**Remark!** When the device is out of range of wireless operation, the scanned codes will be automatically stored in the built-in memory. | |

## Wireless Communication Settings

| | |
|---|---|
|  <br>Enabling 2.4G Radio Mode (Default) |  <br>2.4G Radio Pairing |
|  <br>Turn on Bluetooth HID mode |  <br>Bluetooth HID pairing |
|  <br>SPP Bluetooth Mode<br>To use this feature, you must download the SPP Bluetooth transmission software |  <br>Bluetooth BLE Mode<br>To use this function, you need to download the Bluetooth BLE transmission software. |

## Interface Settings

| | |
|---|---|
|  <br>USB-HID |  <br>USB Virtual COM |

## USB-HID Data Type

| | |
|---|---|
| Setting the function keys | Setting characters from an ASCII table |

## Storage mode settings

| | |
|---|---|
| Deleting Stored Data | Amount of data saved |
| Transfer of saved data | |

## Beep settings

| | |
|---|---|
| Beep muted | High beep volume (default) |

| | |
|---|---|
| Average beep volume | Low beep volume |

## Sleep mode settings

| | |
|---|---|
| Sleep mode off | Instant Sleep |
| Sleep mode after 10 s | Sleep mode after 30 s |
| Sleep mode after 1 minute | Sleep mode after 2 minutes |

| | |
|---|---|
|  Sleep mode after 5 minutes |  Sleep mode after 10 minutes |
|  Sleep mode after 30 minutes | |

**Remark!** To put the reader into sleep mode, hold the button for about 8 seconds until a beep sounds. When you release the button, the scanner will go into sleep mode.

## Case settings

| | |
|---|---|
|  Normal case (default) |  Uppercase letters |

| | |
|---|---|
| Lowercase | Inversion |

## Reverse Code Scan Setting

(For 1D/DataMatrix/Aztec codes only)

| | |
|---|---|
| Normal code | Inversion (code reversed) |
| Normal and Inverted Code Scanning | |

## Barcode Scan Settings

### Enable/disable all types of codes

**Remark!** Enabling all types of barcodes will reduce the encoding speed. We recommend that you enable individual codes as needed. By default, all codes are enabled.

| | |
|---|---|
|  |  |
| Enable scanning of all codes | Disabling scanning of all codes |

## Enable/disable all types of 1D codes

| | |
|---|---|
|  |  |
| Enabled scanning of all types of 1D codes | Disabled scanning of all types of 1D codes |

## Enable/disable all types of 2D codes

| | |
|---|---|
|  |  |
| Enabled scanning of all types of 2D codes | Disabled scanning of all types of 2D codes |

## Setting the Code Scan Mode

| | |
|---|---|
|  Manual Mode |  Auto Mode |

## Repeating Barcode Detection Mode

The scanner detects repeated codes and reads or writes to the built-in memory only once if the set time is not exceeded.

| | |
|---|---|
|  500 ms |  750 ms (default) |
|  1 sec |  2 s |

## Light signal settings

| | |
|---|---|
|  Indicator LED off |  LED indicator light on (default) |

## End-character settings

| | |
|---|---|
|  No end characters |  Enter (default) |
|  LF |  Tab |
|  ENTER + LF | |

## Character hiding settings

| | |
|---|---|
|  Hide initial digits |  Hiding trailing digits |

**Hide initial digits**

**Steps:**

1. You need to scan the code "Hide initial digits"
2. You need to set the first few digits to be hidden, the data will be presented as the decimal number XX.
3. Set how many digits have been hidden from the first few characters in the two-digit YY sequence.
4. Finally, you should scan the "Save Settings" code. XX stands for the number of digits from the beginning. YY shows how many digits have been hidden.

**Example: the** barcode content is "ABCDEFGHIJKLMN", we hide the characters "DEFGH", the output code will be in the form "ABCDIJKLMN".

1. Scan the code "Hiding the first digits"
2. The position of the "E" character is the fourth bit, so XX is 0.4. Locate the data code table and scan the tables for data 0 and 4 in turn.
3. The hidden "DEFGH" stands for a total of 5 characters, so YY is 0 and 5. Locate the code table and scan data tables 0 and 5 respectively.
4. Finally, you should scan the "Save Settings" code.

**Hiding trailing digits**

**Steps:**

1. Scan the "Hiding Trailing Digits" code
2. Select the last few digits to be hidden. They will be presented in the form of two codes as the decimal number XX.

3. Set how many digits have been hidden from the first few characters in the two-digit YY sequence.
4. Finally, you should scan the "Save Settings" code. XX represents the penultimate digit, i.e. hidden before the penultimate character. YY means how many digits have been hidden.

**Example:** We want to hide the characters "DEFGH" in the content of the barcode "ABCDEFGHOJKLMN". We will get the output code in the form of "ABCDIJKLMN".

1. You need to scan the code "Hiding numbers on the back".
2. The position of the "H" character is 7 bit, so XX is 0 and 7.
3. The hidden characters "DEFGH", are a total of 5 characters, so YY is 0 and 5. Search for the code data table and scan the code tables 0 and 5 respectively.
4. Finally, you should scan the "Save Settings" code.

## Prefix and suffix adding settings

| | |
|---|---|
|  Add a prefix |  Add a suffix |
|  Save settings | |

**Prefix Adding Settings**

**Steps:**

1. You need to scan the code "Add a prefix setting".
2. Select the first few digits of the sequence to start inserting characters. To do this, use a two-digit data code. XX represents a decimal number.
3. Find the ASCII character table and scan the appropriate value one by one.
4. Finally, you should scan the "Save Settings" code.

**Example:** The original barcode content is "ABCDEFGHIJKLMN". The content after adding the prefix should be in the form "ABCDE12345FGHIJKLMN"

1. Scan the "Add Prefix Setting" code.
2. In the original barcode, the prefix "12345" is added before the "F" character. The contents position of the "F" code is the sixth character, so the XX data code is 0 and 6. Search the code data table and scan the barcode that corresponds to the data code one by one.
3. The content added in the original code is "12345" and it has a total of 5 characters. Find the ASCII characters "1", "2", "3", "4", "5" corresponding to the ASCII code "31", "32", "33", "34", "35" in the ASCII character table and scan the appropriate barcode one by one.
4. Finally, you should scan the code "Save settings"

**Settings for adding a suffix**

**Steps:**

1. You need to scan the "Add suffix setting" code.

2. Then scan the appropriate sequence of codes assigned in the ASCII character table.
3. Finally, scan the "Save Settings" code.

Any preset Suffix character can be removed by scanning the "Factory Reset" code.

# Appendix 1. Numeric code table

0

1

2

3

4

5

6

7

8

9

# Appendix 2. ASCII character table

| | |
|---|---|
| No ASCII character | SOH |
| STX | ETX |

EOT ENQ ACK

BEL BS HT

LF VT FF

CR SO SI

DLE DC1 DC2

DC3 DC4 NAK


SYN
ETB
CAN
EM
SUB
ESC
FS
GS
RS
US
SP
!
"
#
$
%
&
'
(
)
*
+
,
-
.
/
0

1

2

3

4

5

6

7

8

9

:

;

<

=

>

?

@

A

B

C

D

E

F

G

H

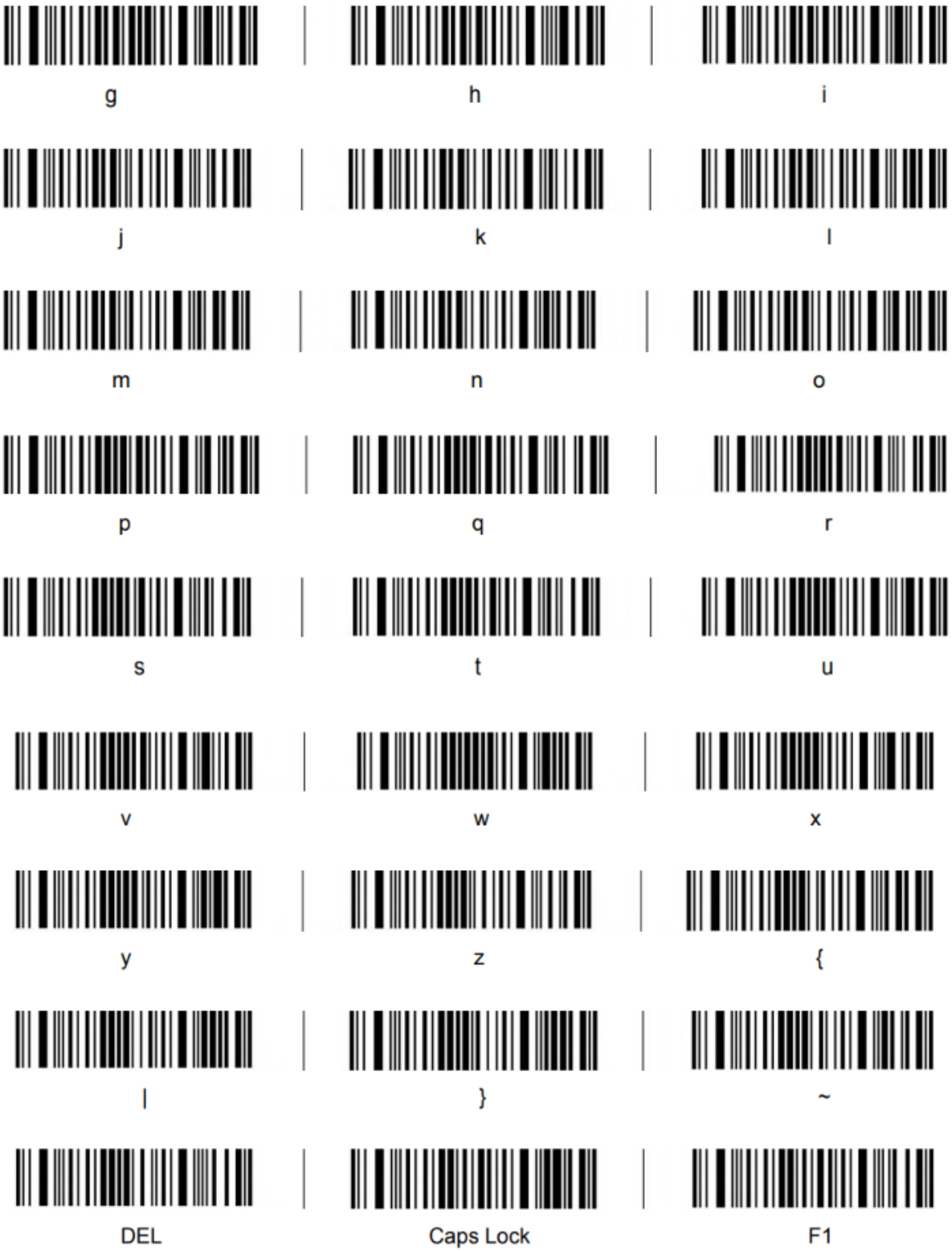
I

J

K


L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z


[
\
]
^
-
`
a
b
c
d
e
f


g
h
i
j
k
l
m
n
o
p
q
r
s
t
u
v
w
x
y
z
{
|
}
~
DEL
Caps Lock
F1


F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
PrintScreen
Scroll Lock
Pause
Insert
Home
PageUp
Delete
PageDown
End
RightArrow
LeftArrow
DownArrow
UpArrow
Num Lock(keypad)
/(keypad)
*(keypad)

-(keypad)

+(keypad)

Enter(keypad)

1(keypad)

2(keypad)

3(keypad)

4(keypad)

5(keypad)

6(keypad)

7(keypad)

8(keypad)

9(keypad)

0(keypad)

.(keypad)

# Appendix 3. Function keys

L-Ctrl Press

L-Shift Press

L-Alt Press

M-GUI Press

R-Ctrl Press

R-Shift Press

R-Alt Press

R-GUI Press

L-Ctrl Release

L-Shift Release

L-Alt Release

L-GUI Release

R-Ctrl Release

R-Shift Release

R-Alt Release

R-GUI Release