2DScan™ Barcode Scanner

Quick Start Manual

Default

Check Version

IDTECH®

Value through Innovation

FCC WARNING STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation of this device is subject to the following conditions: this device may not cause harmful interference and this device must accept any interference received, including interference that may cause undesired operation.

CANADIAN DOC STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.
Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de las classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par les ministère des Communications du Canada.

CE STANDARDS

Testing for compliance to CE requirements was performed by an independent laboratory. The unit under test was found compliant to class B limits of part 15 of the FCC rules.

LIMITED WARRANTY

ID TECH warrants to the original purchaser for a period of 36 months from the date of invoice that this product is in good working order and free from defects in material and workmanship under normal use and service. ID TECH's obligation under this warranty is limited to, at its option, replacing, repairing, or giving credit for any product which has, within the warranty period, been returned to the factory of origin, transportation charges and insurance prepaid, and which is, after examination, disclosed to ID TECH's satisfaction to be thus defective. The expense of removal and reinstallation of any item or items of equipment is not included in this warranty. No person, firm, or corporation is authorized to assume for ID TECH any other liabilities in connection with the sales of any product. In no event shall ID TECH be liable

for any special, incidental or consequential damages to purchaser or any third party caused by any defective item of equipment, whether that defect is warranted against or not. Purchaser's sole and exclusive remedy for defective equipment, which does not conform to the requirements of sales, is to have such equipment replaced or repaired by ID TECH. For limited warranty service during the warranty period, please contact ID TECH to obtain a Return Material Authorization (RMA) number & instructions for returning the product.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. THERE ARE NO OTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, OTHER THAN THOSE HEREIN STATED. THIS PRODUCT IS SOLD AS IS. IN NO EVENT SHALL ID TECH BE LIABLE FOR CLAIMS BASED UPON BREACH OF EXPRESS OR IMPLIED WARRANTY OF NEGLIGENCE OF ANY OTHER DAMAGES WHETHER DIRECT, IMMEDIATE, FORESEEABLE, CONSEQUENTIAL OR SPECIAL OR FOR ANY EXPENSE INCURRED BY REASON OF THE USE OR MISUSE, SALE OR FABRICATIONS OF PRODUCTS WHICH DO NOT CONFORM TO THE TERMS AND CONDITIONS OF THE CONTRACT.

Section 1
INTRODUCTION

2DScan is a 1D & 2D barcode reader. It can be used as a hand-held reader or as hand-free reader in a stand. Ergonomic design provides comfortable and easy use.

● **Main Unit & Accessories**

- 2DScan

- PS/2 Keyboard Cable

- USB Cable
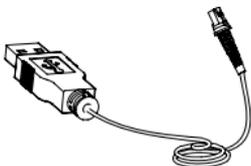
- RS232 Cable + Power Adapter

- Stand

① Iron/SK7 spring steel Holder
② Tube
④ eva sponge
③ SPCC Base
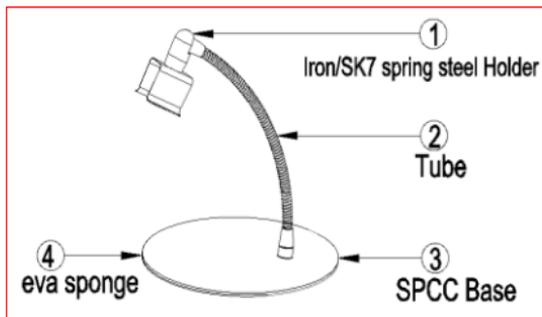
● **Outline**
LED 、Scan Window and Certifications

Beeper

Led

Power Indicator

Scan Windows

Tag (S/N、Cetifications、etc)

Trigger
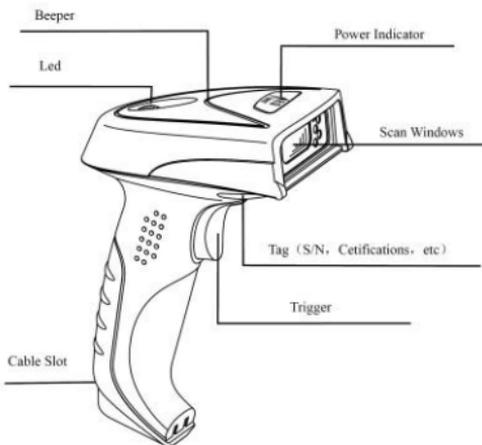
Cable Slot

Section 2
INSTALLATION AND OPERATION

● **Connect 2DScan to the Host**

- Connecting with PS/2 Cable
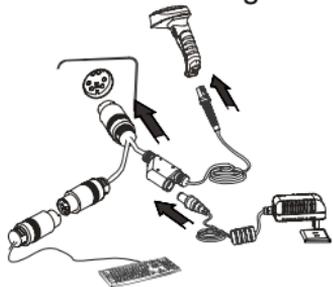
1. Insert PS/2 cable (RJ 45 male (del)DIN) into 2DScan cable slot
2. Insert PS/2 cable (PS/2 male DIN) into Host PS/2 female slot
3. If necessary, connect PS/2 cable and the power adapter
4. If necessary, keyboard can connect to female DIN slot on the PS/2 cable

- Connecting with USB Cable
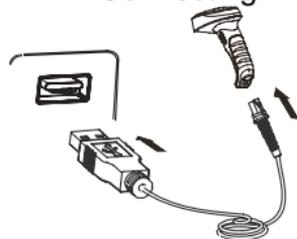
1. Insert USB Cable (RJ45 male head) into 2DScan cable slot
2. Insert USB Cable (USB male head) into Host's (female) USB connector

● Connecting with RS232 Cable
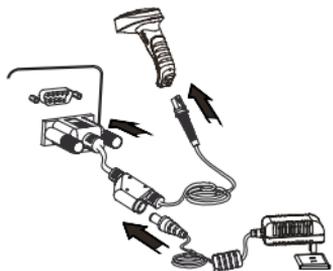
1. Insert RS232 cable (RJ 45 male head) into 2DScan cable slot.
2. Insert RS232 cable (RS232 male head) into Host's (female) RS232 connector
3. Connect RS232 cable and the power adapter

● **Interface Setting**

Scan the "Programming ON" first to enable the scanner to enter setting mode. Then scan on the associated interface from the right column and lastly leave the setting mode by scanning the "Programming OFF" barcode from the left.

USB

Programming ON

PS/2

Programming OFF

RS232

- **Data Interface**
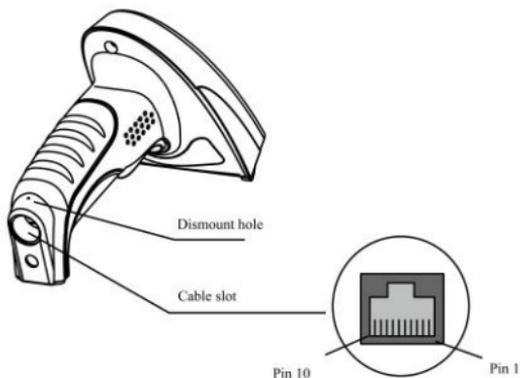
PIN OUT

There are two types of 2DScan with different PIN outs

RS232/USB Interface Definition

Pin	Function
1	NC
2	NC
3	VCC 5.0V
4	TXD
5	RXD
6	CTS
7	RTS
8	GND
9	USBC_D-
10	USBC_D+

USB/PS2 Interface Definition

Pin	Function
1	NC
2	NC
3	VCC 5.0V
4	KB_CLK
5	KB_DATA
6	PC_CLK
7	PC_DATA
8	GND
9	D-
10	D+

Section 3
TROUBLESHOOTING

Troubleshooting assistance for common problems:

● **Scanner does not turn on**

- With RS232 interface, maybe the power adapter is not being connected, please connect the power adapter to the cable; the other end goes to the wall outlet.
- With RS232 interface, maybe the communication is not established due to the cable is not being connected right. Please connect the cable to the right COM port on the host
- With USB or PS/2 communication, maybe the communication is not established due to the cable is not being connected right. Please connect the cable to the right USB port or PS2 keyboard port

● **The Scanner does not output data.**

- Maybe scanner is not being connected to the host correctly; please check cable connection on host computer side.
- May be the scanner was not being configured to the correct interface, please reconfigure the interface type for the scanner to match the cable used

● **Receive garbled with RS232**

- Maybe due to the scanner and the host communication parameters (such as baud rate, data bit, parity, etc.) doesn't match. Please check both side settings to ensure they match with each other

● **Scanner does not read barcodes**

- Maybe the specific barcode is not enabled, please enable it.
- May be the barcode is not valid. Please check the barcode with another scanner to verify it can be read.
- Maybe the scanner firmware doesn't support that specific barcode; please contact the dealer or us.

Section 4
SPECIFICATION

Performance		
Image Sensor		CMOS
Resolution		752 X 480 pixels
Interface		RS232 / HID-KBW / USB DataPipe / USB COM Port Emulation / HID-POS
Symbologies	2D	PDF417, QR Code(Model 1/2), DataMatrix (ECC200, ECC000, 050, 080,100,140), Aztec Code, Maxicode
	1D	Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ISBN, Code 93, GS1 Databar, Code 11
Precision		≥ 5mil
Light Source		LED(630 nm ± 10 nm)
Light Intensity		300 LUX (130 mm)
Depth of Scan Field		30 mm ~ 445 mm
Print Contrast Signal		≥30%
Roll		360° (Omnidirectional)
Pitch		45°
Yaw		45°
Illumination		0 ~ 100,000 LUX
Mechanical/ Electrical		
Power Consumption		1.65 W
Voltage		DC 5 V
Current	Max	330 mA
	Oper.	290 mA
	Idle	200 mA
Weight		250g
Environment		
Operate Temperature		-5°C - +45°C
Storage Temperature		-40°C - +60°C
Humidity		5% - 95% (non-condensing)
Certificates		
FCC Part15 Class B, CE EMC Class B		

Section 5
READING MODE SETTINGS

- **Hand-held Mode**: Pull and hold the trigger to read. Complete one read or release the trigger to terminate reading status.

- **Auto Mode**: When the ambient luminance changes in front of the engine,it automatically initiate reading. After completion of reading, the engine goes to idle. Both luminance change and the Trigger can initiate reading when idle.

- **Continuous Mode**: Pull the trigger to start reading. The engine will keep reading. To stop, pull trigger again.

Hand-held Mode

Code Programming On

Auto Mode

Code Programming Off

Continuous Mode

Note: Programming sequences:
1. Read "Code Programming On"
2. Read programming code, such as "Hand-held Mode"
3. Read "Code Programming Off".

Section 6
TESTING CODES

Code128

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059183979215

UCC/EAN-128

||||||||||||||||||||||||||

059183979215

UPC-E

||||||||||||||||||||||||||

0 1 2 3 4 5 6 5

UPC-A

||||||||||||||||||||||||||

0 0 9 8 7 6 5 4 3 2 1 5

Interleaved 2 of 5

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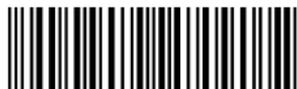
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Code39

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123456

PDF417

QR Code

DataMatrix

Full User's Manual is available for download on
www.idtechproducts.com

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