ValueScan II™
Barcode Scanner

Quick Start Manual

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.

The information contained herein is provided to the user as a convenience. While every effort has been made to ensure accuracy, ID TECH is not responsible for damages that might occur because of errors or omissions, including any loss of profit or other commercial damage, nor for any infringements or patents or other rights of third parties that may result from its use. The specifications described herein were current at the time of publication, but are subject to change at any time without prior notice.

©2009-2014 International Technologies & Systems Corporation. The information contained herein is provided to the user as a convenience. While every effort has been made to ensure accuracy, ID TECH is not responsible for damages that might occur because of errors or omissions, including any loss of profit or other commercial damage. The specifications described herein were current at the time of publication, but are subject to change at any time without prior notice.

ID TECH is a registered trademark of International Technologies & Systems Corporation. ValueScan II and Value through Innovation are trademarks of International Technologies & Systems Corporation.

Section 1
INTRODUCTION

The ValueScan II is the ideal scanner for retail applications. Its light-weight, easy-to-handle form factor makes scanning a breeze. Operation is intuitive, no warm up or waiting: Just point and scan! The ValueScan II reads all commonly used barcode symbologies from contact up to a distance of 125mm. Available in black or gray to match most retail systems, the ValueScan II offers easy plug and play installation. For all retail and similar applications, this small mid-range imager delivers unmatched cost / performance.

● Light Weight, Ergonomic Design

● General Purpose reader - a single device
   covering the broadest range of applications

● Durable - without any moving parts to wear out

● 100 scans per second and working range from
   contact to 150mm on medium density barcodes

● Excellent Scanning Performance starting at
   0.1mm (4 mil)

● Readable Under Sun Light

● Reliability
   (1) Trigger: 1,000,000 times
   (2) Cable: 320,000 times (90°)
   (3) Drop: 1.2 meter

Section 2
INSTALLATION AND OPERATION

Installation- RS-232

1. Disconnect power to the terminal/computer.

2. Connect the external power supply (DC adapter) to the interface cable of the scanner.

3. Plug the serial connector into the serial port on the back of your computer/terminal. Tighten the two screws to secure the connector to the port.

4. Plug the power pack into power source.

5. Once the scanner has been fully connected, turn the terminal/computer power back on.

Installation- USB (Simulates keyboard wedge)

1. Connect the USB cable to the terminal/computer.

2. Windows will automatically detect the USB device.

Note: If any of the above operation is incorrect, turn off the power immediately and check any improper connections. Go through all above steps again.

Pin Assignments

RS-232 DB-9F Connector (To Host Side):

Pin	Definition
1	NC
2	TXD
3	RXD
4	NC
5	GND
6	NC
7	CTS
8	RTS
9	VCC (+5V)
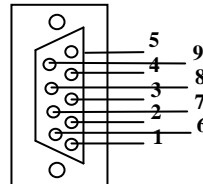
Scanning mode:

Good-read off-The trigger button must be pressed to activate scanning. The light source of imager stops scanning when there is a successful reading or no code is decoded after the Stand-by duration elapsed.

Momentary-The trigger button acts as a switch. Press button to activate scanning and release button to stop scanning.

Alternate-The trigger button acts as a toggle switch. Press button to activate or stop scanning.

Timeout off-The trigger button must be pressed to activate scanning, and imager stops scanning when no code is decoded after the Stand-by duration elapsed.

Continue-Imager always keeps reading, and it does not matter when trigger button is pressed or duration is elapsed.

Test only-For test of scan performance only. It is improper to be utilized to check the accuracy of transmitted data.

Double read timeout: The imager will require a several times successful decoding to confirm the data when enabled. The more confirming times required, the more inhibitive miss-reading code will be shown. The Multi field scan Enable function won't be able to work if set Double confirm.

Double confirm: If the barcode has been scanned twice, then only the first barcode will be accepted.
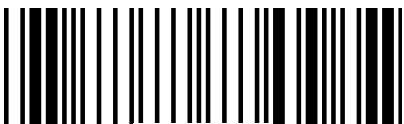
Supplement Check Counter: It will be more reliable to read the barcode with extension (supplement) like UPCE/A or EAN-8/13, but slow down the decoding speed when this counter is set more.
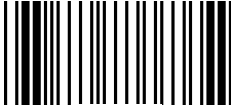
$%+PRO   **Program**

Option Bar Code	Option	Alphanumeric Entry
7AA Scanning mode	Good-read off Momentary Alternate Timeout off Continue Test only	00 01 * 02 03 04 05
7AB Stand-by duration	01-99 (second)	00-99 06 *
7AC Double read timeout	01-99 (10 msec)	01-99 50 *
7AD Double confirm	00-09 (00: no double confirm)	00-09 00 *
7AE Supplement Check Counter	00-64 (verifications)	00-64 30 *

%$$ **Exit**

0	*\/0*	A	*\/A*
1	*\/1*	B	*\/B*
2	*\/2*	C	*\/C*
3	*\/3*	D	*\/D*
4	*\/4*	E	*\/E*
5	*\/5*	F	*\/F*
6	*\/6*		
7	*\/7*		
8	*\/8*		
9	*\/9*		

Finish

%%

Section 3
TROUBLESHOOTING

Troubleshooting assistance for common problems:

- **The data from the Scanner is not as expected.**

    ANS: Please download full User's Manual and follow all instructions.

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

    . **ANS:** Check basic operation: connect the cable; see if the desired barcode type (symbology) is enabled.

- **The Scanner does not function with the computer.**

    ANS: Verify the interface cable is securely connected to the host computer. Consult your technical support personnel or refer to your host system manual to verify the proper connection for the imager.

Reset Scanner to factory default settings

If you wish to return the scanner to all the factory default setting, scan the Default value initialization bar code.

Step 1. Program

$%+PRO

Step 2. Default

!IN

Step 3. Exit

%$$

Firmware version list

If you wish to display the firmware version, scan the Firmware version list.

Step 1. Program

$%+PRO

Step 2. Version list

!VR

Step 3. Exit

%$$

Section 4
SPECIFICATION

ValueScan II	
Specification	
Operational	
Light Source	660 nm Visible Red LED
Optical System	2048 pixel CCD (Charge-coupled device)
Depth of Scan Field	0-180 mm (CODE 39, 500Lux, PCS=90%, 20mils)
Scanning Width	50 mm wide @ 10mm
Scan Speed	100 scans/sec
Resolution	0.1mm (4mils) Code39,PCS=90%
Print Contrast	45% or more
Scanning Angle	Pitch: 60° Yaw: 70°
Decode Capability	Auto-discriminates all standard one dimension barcodes
Beeper Operation	7 tones or no beep
Indicator	Green led and beep sound
Mechanical	
Length	176 mm
Width-handle	40 mm
Width-head	67 mm
Depth-handle	30 mm
Depth-head	40 mm
Weight	90 g (cable not included)
Connector type	Crimp type female connector
Case material	ABS plastic
Cushion material	TPR
Electrical	
Input Voltage	5 VDC ± 0.25V
Power - Operating	Max. 750 mW
Power - Standby	150 mW
Current - Operating	Max. 150 mA @ 5 VDC
Current - Standby	30 mA @ 5 VDC
DC Transformers	Class 2; 5VDC @ 450 mA
Agency listing	FCC Class B, CE
Environmental	
Operating Temperature	0℃ to 45℃ (32℉ to 113℉)

Storage	-20℃ to 60℃ (-4℉ to 140℉)
Humidity	10% to 90% relative humidity, non-condensing
Light Level	Up to 20000 Lux
Shock	1.5m drop onto concrete
Contaminants	Seals to resist airborne particulate contaminants
Ventilation	None required
Programming	
Programming method	Manual (Reading special barcode), DOS command through RS-232 (RS-232 model)
Programmable characteristics	Code type selection, check digit selection, Decoding option Transmitted character delay, Header selection, trailer selection, message suffix, good read beep tone and volume, scanner trigger selection Keyboard emulation type (intermessage delay, keyboard type and keyboard language) Serial interface type (ACK/NAK, Xon/Xoff, RTS/CTS, good read LED control, start/stop bits)

Section 5
READING MODE SETTINGS

Default setting
For each barcode shown as below:
V = Enabled as default setting
- = Not supported
Empty space = Download User's Manual;
Please visit IDTECH website: www.idtechproducts.com

Code Type	Read Enable	Checksum Verification Enable	Checksum Transmission Enable	Code ID
UPC-A	V	V	V	A
UPC-E	V	V	V	E
EAN-13	V	V	V	F
EAN-8	V	V	V	FF
Code 39	V			*
Interleaved 2 of 5	V			I
Industrial 2 of 5		-	-	I
IATA				I
Matrix 2 of 5				B
Codabar				%
Code 128	V	V		#
Code 93		V two digits		&
Code 11		V One digit		O
MSI/Plessey		V		@
UK/Plessey		V		@
Telepen				S
Standard 2 of 5				I
GS1 DataBar Omnidirectional		-	-	R4
GS1 DataBar Limited		-	-	RL
GS1 DataBar Expanded		-	-	RX
China Post		-	-	t
Italian Pharmacode		-	-	p

Section 6
TESTING CODES

UPC-E

0 1 2 3 4 5 6 5

UPC-A

0 09876 54321 5

Interleaved 2 of 5

059183979215

Code 39

123456

Code 128

059183979215

UCC/EAN-128

059183979215

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

ID TECH
10721 Walker Street
Cypress, CA 90630
(714) 761-6368
www.idtechproducts.com

80104501-001 rev.C