

Handheld Reader V410-H

Versatile, powerful decode performance for any application.

- Simple configuration and management of multiple readers via WebLinkPc
- Point-and-shoot decode performance and minimal workflow disruption
- Industry-leading 1D/2D DPM decoding performance with Omron's X-Mode Imaging Technology (V410-H XD)
- IP52 sealing to protect against spills
- Captures 1D and 2D barcodes at variable distances and densities
- Covered speaker and screw holes to mitigate bacteria buildup (V410-H HC)
- On-the-fly switching between handheld and hands-free reading



Product Ordering Information

Part	Description	Part Number
	V410-H XD Handheld Reader, Black Grey, Wired, with X-Mode	V410-HDS4608XD
	V410-H SR Handheld Reader, Black Grey, Wired	V410-HDS4608SR
	V410-H HC Handheld Reader, White, Wired	V410-HDS4608HC

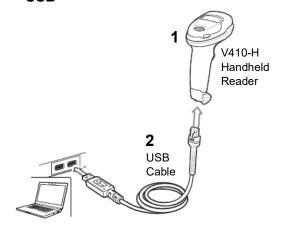
V410-H

Accessories

Appearance	Туре	Part Number
	Presentation Stand, V410-H	V410-AS0
	Cable Assembly, Style 3 USB, 7 Ft, Mod Plug	V410-WUB-2M
	Cable Assembly, RS232, DB9F, TXD-2, 7 Ft, V410-H	V410-WR-2M
	Kit, V410-H AC Power Supply 5.2VDC, 1.1A	V410-AC0-1

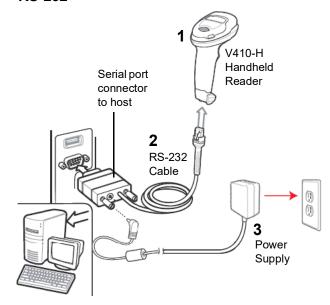
Configurations

• USB



Part	Description	Part Number
	V410-H XD Handheld Reader, Black Grey, Wired, with X-Mode	V410-HDS4608XD
1	V410-H SR Handheld Reader, Black Grey, Wired	V410-HDS4608SR
	V410-H HC Handheld Reader, White, Wired	V410-HDS4608HC
2	Cable, USB, 7 ft., Mod Plug	V410-WUB-2M

• RS-232



Part	Description	Part Number
	V410-H XD Handheld Reader, Black Grey, Wired, with X-Mode	V410-HDS4608XD
1	V410-H SR Handheld Reader, Black Grey, Wired	V410-HDS4608SR
	V410-H HC Handheld Reader, White, Wired	V410-HDS4608HC
2	Cable, RS-232, DB9F, TXD-2, 7 ft.	V410-WR-2M
3	Kit, V410-H AC Power Supply, 5.2 VDC, 1A	V410-AC0-1

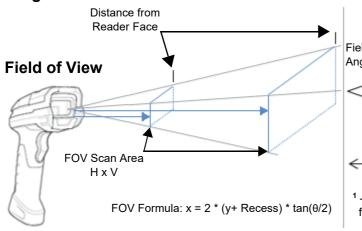
V410-H

Ratings and Specifications

V410-H	XD	SR	НС				
Item		Description					
Physical Characteristics							
Dimensions		6.5 in. H x 2.6 in. W x 3.9 in. D 165 mm H x 67 mm W x 98 mm D					
Weight	5.7 oz. / 161.9 g						
Input Voltage Range	4.5 to 5.5 VDC	Host Powered; 4.5 to 5.5 VDC Externa	l Power Supply				
Operating Current at Nominal Voltage (5.0V)	375 mA (typical)	340 mA (typical)	375 mA (typical)				
Standby Current (Idle) at Nominal Voltage (5.0V)		150 mA (typical)					
Color	Black Grey	Black Grey	Healthcare White				
Supported Host Interfaces		USB 1.1, RS-232					
USB Certification		USB 1.1 Certified					
Keyboard Support		Supports over 90 international keyboard	s				
Electronic Article Surveillance		Compatible with Checkpoint EAS deactivation system					
User Indicators	Direct Decode Indicator, Good Decode LEDs, rear view LEDs, beeper (adjustable tone and volume), haptic/vibration	Direct Decode Indicator, Good Decode LEDs, rear view LEDs, beeper (adjustable tone and volume)	Direct Decode Indicator, Good Decode LEDs, rear view LEDs, beeper (adjustable tone and volume) haptic/vibration				
Performance Characteristics							
Light Source	Aiming Pattern: circular 528nm true green LED	Aiming Pattern: circular 617nm amber LED	Aiming Pattern: circular 528nm true green LED				
Illumination	(2) Warm White LEDs	(2) 660nm Red LEDs	(2) Warm White LEDs				
Imager Field of View	34° H x 21.6° V nominal	36.1° H x 22.6° V nominal	35° H x 22° V nominal				
Image Sensor		1280 x 800 pixels					
Minimum Print Contrast		15% minimum reflective difference					
Skew Tolerance		+/- 60°					
Pitch Tolerance		+/- 60°					
Roll Tolerance		0° - 360°					
Imaging Characteristics							
Graphics Format Support	Imag	es can be exported as Bitmap, JPEG, o	r TIFF				
Image Quality		96 PPI on an A4 document					
Environmental							
Operating Temperature		32.0° to 122.0° F / 0.0° to 50.0° C					
Storage Temperature		-40.0° to 158.0° F / -40.0° to 70.0° C					
Humidity		5% to 95% RH, non-condensing					
Drop Specification	Designed to	withstand multiple drops at 6.0 ft./1.8 n	n to concrete				
Tumble Specification	Designed	to withstand 2,000 tumbles in 1.5 ft./0.5	m tumbler				
Environmental Sealing		IP52					
Approved Cleaners		Standard disinfectants					
Electrostatic Discharge (ESD)	ESD per EN6	1000-4-2, +/-15 KV Air, +/-8 KV Direct, +	-/-8 KV Indirect				
Ambient Light Immunity	C	to 10,000 foot-candles / 0 to 107,600 lu	ıx				
Accessories		Gooseneck Intellistand					
Symbol Decode Capability							
1D	Code 39, Code 128, Code 93, Codaba	r/NW7, Code 11, MSI Plessey, UPC/EAI Base 32 (Italian Pharma)	N, I 2 of 5, Korean 3 of 5, GS1 DataBar				
2D	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, Data Matrix, QR Code, Micro QR, Han Xin, Postal Codes SecurPharm DotCode		PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, Data Matrix, QR Code, Micro QR, Han Xin, Posta Codes, SecurPharm				
OCR		OCR-A, OCR-B, MICR, US Currency	•				
Minimum Element Del-ti	Code 39 - 2.0 mil	Code 39 - 3.0 mil	Code 39 - 2.0 mil				
Minimum Element Resolution	Data Matrix - 4.0 mil	Data Matrix - 5.0 mil	Data Matrix - 4.0 mil				
Decode Ranges (Typical; Printing resolution	on, contrast, and ambient light-deper	ndent)					
Symbology/Resolution	Near/Far	Near/Far	Near/Far				
Code 128: 2 mil	0.3 in. / 8 mm to 2.3 in. / 58 mm						
Code 128: 3 mil	0 in. / 0 mm to 3.5 in. / 88 mm						
Code 128: 5 mil		2.7 in. / 69 mm to 5.4 in. / 137 mm	1.7 in. / 43 mm to 5.0 in. / 127 mm				
Code 128: 15 mil	4.2 in. / 107 mm to 8.6 in. / 218 mm						
Code 39: 2 mil	0.2 in. / 5 mm to 3.0 in. / 76 mm						
		2.2 in. / 56 mm to 5.4 in. / 137 mm	1.3 in. / 33 mm to 6.0 in. / 152 mm				
Code 39: 3 mil	0 in. / 0 mm to 3.8 in. / 96 mm	2.2 111. / 30 11111 10 3.4 111. / 137 11111	1.3 11. / 33 11111 10 0.0 11. / 132 11111				
Code 39: 3 mil Code 39: 5 mil	0 in. / 0 mm to 3.8 in. / 96 mm 0 in. / 0 mm to 5.2 in. / 132 mm	0.7 in. / 18 mm to 11.0 in. / 279 mm	0.1 in. / 3 mm to 11.5 in. / 292 mm				

V410-H	XD	SR	НС				
Item	7.2	Description					
PDF417: 4 mil	0 in. / 0 mm to 3.3 in. / 84 mm						
PDF417: 5 mil	0 in. / 0 mm to 3.8 in. / 96 mm						
PDF417: 6.6 mil	0 in. / 0 mm to 4.5 in. / 114 mm						
PDF417: 6.7 mil		1.3 in. / 33 mm to 10.0 in. / 254 mm	0.6 in. / 15 mm to 9.3 in. / 236 mm				
UPC: 13 mil (100%)	0 in. / 0 mm to 8.5 in. / 215 mm	0 in. / 0 mm to 28.0 in. / 711 mm	0 in. / 0 mm to 18.0 in. / 457 mm				
Data Matrix: 4 mil	0.2 in. / 5 mm to 2.8 in. / 71 mm						
Data Matrix: 5 mil	0 in. / 0 mm to 3.4 in. / 86 mm						
Data Matrix: 10 mil	0 in. / 0 mm to 4.8 in. / 122 mm	1.0 in. / 25 mm to 11.5 in. / 292 mm	0.2 in. / 5 mm to 9.5 in. / 241 mm				
QR Code: 10 mil	0 in. / 0 mm to 4.5 in. / 114 mm						
QR Code: 20 mil		0 in. / 0 mm to 17.5 in. / 445 mm	0 in. / 0 mm to 13.5 in. / 343 mm				
Utilities and Device Management							
WebLink _{PC}	Programs reader parameters	s, upgrades firmware, provides encoded b troubleshooting	arcode data, allows image-based				
Regulatory Compliance							
LED Safety Standard		IEC 62471 Exempt Risk Group					
EMC Standards	EN 5	5032, EN 55035, FCC Part 15, Subpart B	(Class B)				
Safety Standards		EN 62368-1					
Certifications		RCM, EAC, BSMI, CE, cULus, KC, UKC	CA				

Imager Field of View



Field of View
Angle θ

Range ×

Distance¹ + 62.5 mm

Note: The Recess value of 62.5 mm is the distance from the reader front face to the image sensor inside the reader. The Distance and Recess values are added together for the FOV Scan Area calculation.

¹ - The Distance value is measured from the front face of the reader to the object being encoded.

XD: Image Field of View in degrees = 34 (horizontal) x 21.6 (vertical)

y (mm)	y + Recess	θ	Range x (mm)	FOV Scan Area H x V (mm)	Distance from Reader Face (mm)	FOV Scan Area H x V (in)	Distance from Reader Face (in)
5	67.5	34	41	41 x 26	5	1.6 x 1.0	0.2
5	67.5	21.6	26	-	-	-	-
71	133.5	34	82	82 x 51	71	3.2 x 2.0	2.8
71	133.5	21.6	51	-	-	-	-

SR: Image Field of View in degrees = 36.1 (horizontal) x 22.6 (vertical)

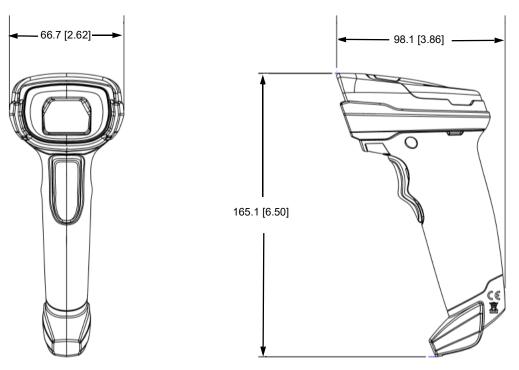
y (mm)	y + Recess	θ	Range x (mm)	FOV Scan Area H x V (mm)	Distance from Reader Face (mm)	FOV Scan Area H x V (in)	Distance from Reader Face (in)
25	87.5	36.1	57	57 x 35	25	2.2 x 1.4	1.0
25	87.5	22.6	35	-	-	-	-
445	507.5	36.1	331	331 x 203	445	13.0 x 8.0	17.5
445	507.5	22.6	203	-	-	-	-

HC: Image Field of View in degrees = 35 (horizontal) x 22 (vertical)

y (mm)	y + Recess	θ	Range x (mm)	FOV Scan Area H x V (mm)	Distance from Reader Face (mm)	FOV Scan Area H x V (in)	Distance from Reader Face (in)
3	65.5	35	41	41 x 25	3	1.6 x 1.0	0.1
3	65.5	22	25	-	-	-	-
292	354.5	25	223	223 x 138	292	8.8 x 5.4	11.5
292	354.5	22	138	-	-	-	-

Dimensions (Unit: mm / [in])

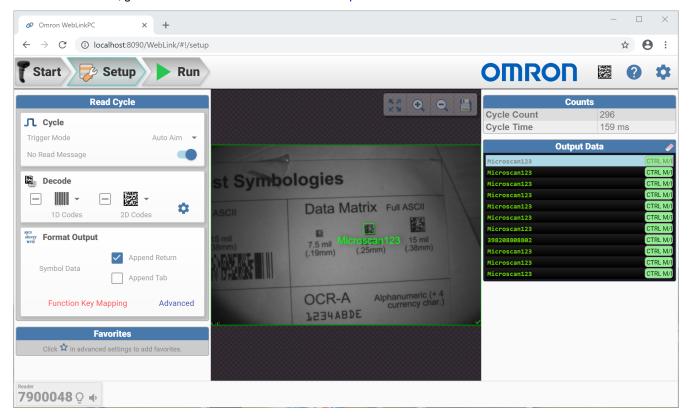
V410-H Handheld Reader



Note: Reader dimensions are the same for the V410-H XD, V410-H SR, and V410-H HC.

WebLink_{PC}

Screenshot of WebLinkpc Setup screen where the user configures the handheld reader to meet application requirements. To download WebLinkpc, go to www.automation.omron.com/weblinkpc.



Related Manuals

Man. No.	Model	Manual
Z439 (84-9000362-02)		V410-H and V450-H Handheld Barcode Reader User Manual

Terms and Conditions Agreement

Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranties.

- (a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
- (b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See http://www.omron.com/global/ or contact your Omron representative for published information.

Limitation on Liability: Etc.

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

Errors and Omissions.

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

Note: Do not use this document to operate the Unit.

OMRON Corporation Industrial Automation Company

Kyoto, JAPAN Contact : www.ia.omron.com

Regional Headquarters

OMRON EUROPE B.V.

Wegalaan 67-69, 2132 JD Hoofddorp The Netherlands Tel: (31) 2356-81-300 Fax: (31) 2356-81-388

OMRON ASIA PACIFIC PTE. LTD.

438B Alexandra Road, #08-01/02 Alexandra Technopark, Singapore 119968 Tel: (65) 6835-3011 Fax: (65) 6835-2711 OMRON ELECTRONICS LLC

2895 Greenspoint Parkway, Suite 200 Hoffman Estates, IL 60169 U.S.A. Tel: (1) 847-843-7900 Fax: (1) 847-843-7787

OMRON (CHINA) CO., LTD.

Room 2211, Bank of China Tower, 200 Yin Cheng Zhong Road, PuDong New Area, Shanghai, 200120, China Tel: (86) 21-5037-2222 Fax: (86) 21-5037-2200 Authorized Distributor:

©OMRON Corporation 2023 All Rights Reserved. In the interest of product improvement, specifications are subject to change without notice.

Cat. No. Q292-E-03 (SP110A-EN-0523)

Printed in Japan 0523 (0620)