

M-10

Quick Start Guide

OPTICON

Introduction

- The M-10 is an omnidirectional presentation imager scanner that can read 1D and 2D codes just by holding a label in front of the scanner.
- Read this quick start guide carefully before installing and/or using this product.
- Keep this quick start guide for future reference and store in a safe place.

Notice

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Caution and Warning (Refer to the specification manual and instruction guide for details)

- LED light**
 - Do not stare into the LED light from the scan window. It may damage your eyes.
- Handling**
 - Do not disassemble this product.
 - Do not put heavy items on and apply any shock to the product.
 - Do not use this product near combustible materials. It may result in rupture and ignition of it.
 - Do not swing the product around by the cable. It may cause injury, an accident, and damage to the device.
 - Keep the product out of the reach of small children.
 - Do not insert foreign substances into this product.
 - Do not use this product in any environment where serious damage is considered to occur.
 - Do not use this product near water or other liquids.
 - Do not store this product in dusty environments and in extremely high humidity.
 - If perchance condensation formed on the product, abstain from the use of it until moisture has evaporated to prevent malfunctions.
 - Avoid static electricity and do not put the product near a radio or a TV. Excessive static electricity may cause malfunctions.
 - Do not store this device in an extremely cold or hot environment and in areas exposed to direct sunlight for long periods of time.
 - Do not place this product on an unstable place.
 - When cleaning this product, rub gently with either a soft dry cloth or a damp cloth with mild detergent.

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What's in the Box

Confirm that you have the following items before getting started. Please contact the nearest dealer if items are damaged or missing.

USB-HID Keyboard / USB-COM Interface

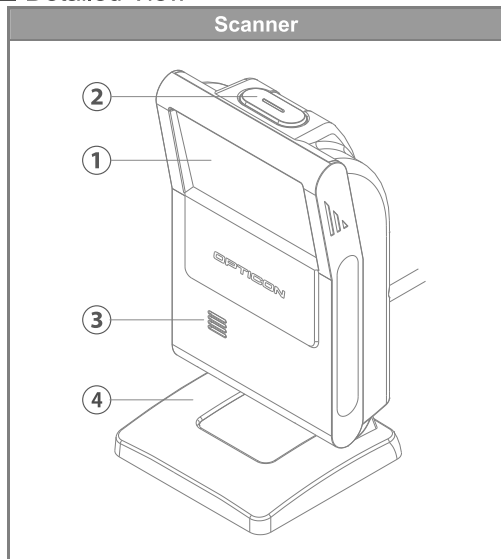
No.	Item	Model	Function
1	Scanner	M-10	Omnidirectional presentation imager scanner
2	USB cable	-	Dedicated USB cable (2 m) for the M-10
3	Quick Start Guide	-	Provides brief instructions on how to use and configure the M-10

RS-232C Interface

No.	Item	Model	Function
1	Scanner	M-10	Omnidirectional presentation imager scanner
2	RS-232C cable	-	Dedicated RS-232C cable (2 m) for the M-10
3	AC adapter	-	AC adapter with interchangeable plugs
4	Quick Start Guide	-	Provides brief instructions on how to use and configure the M-10

Detailed View

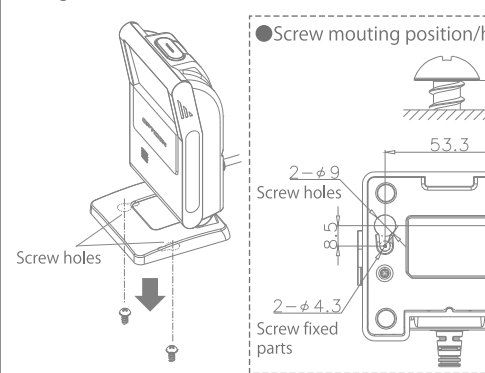
Detailed View



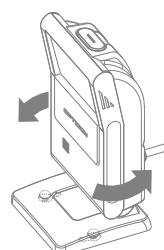
No.	Name	Description
①	Scan Window	A window to which codes are presented
②	Trigger Switch	A trigger switch to read codes for use as a handheld scanner
②	Indicator LED	Light blue: Indicates the scanner being in standby state. Bright blue: indicates a successful read of codes
③	Buzzer Holes	A hole through where a sound comes out from a built-in buzzer.
④	Stand	Stands to adjust the angle of the scanner. Adjustable range: Forward:60° Backward: 15°

How to Fix the Scanner

STEP-1 Mount the screws in your desired location and put them through the screw holes in the bottom of the scanner.



STEP-2 Turn the scanner. (Clockwise 18°)



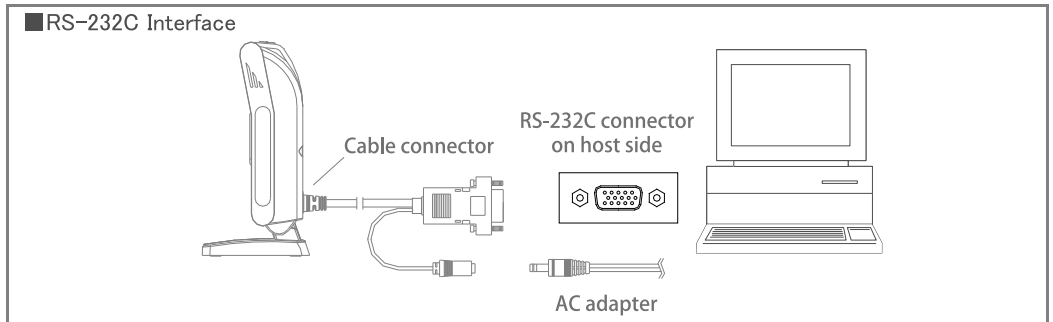
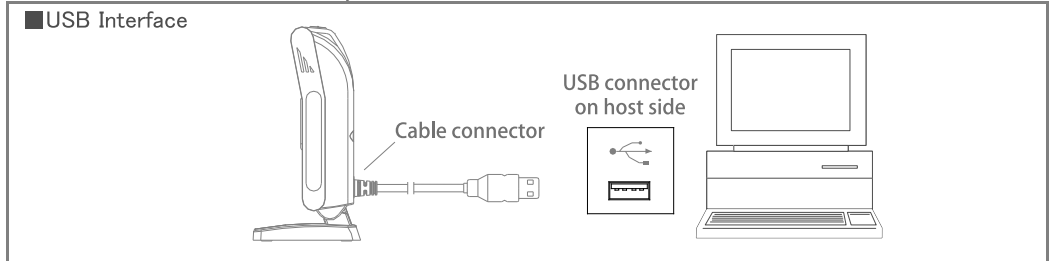
STEP-3 Scanner is now fixed.



* In case there is a screw loose, adjust the screw height.

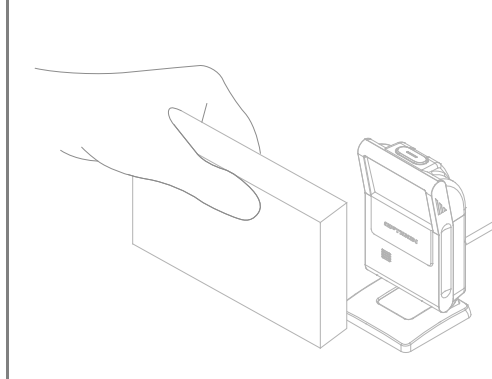
Connection and Operation Check

- Connect the interface cable to the scanner
 - Firmly insert the connector of the interface cable into the jack on the scanner in the correct direction.
 - ※ Press a pin whole in the lower part of the scanner to remove the cable.
- Connect to the Host
 - Connect the connector of the interface cable to the appropriate connector on the host side. When it is connected, the startup buzzer will sound and the light blue LED at the top of the scanner will light up to indicate that it is now in standby mode.



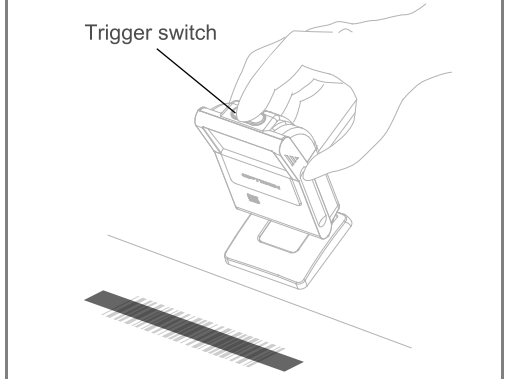
Basic Operation

Hands-free



- Present a code in front of the scan window (within approx. 150 mm) for the scanner to start reading automatically. If the scanner does not read the code smoothly, move and adjust the position of the code.

Handheld



- When reading a specific code with the handheld scanner, follow the steps below:
 - Press the trigger switch once, then a green single aiming line lights up (for 3 sec by default).
 - Position the single aiming line over the code and press the trigger switch again to start reading.

Basic Specifications

Basic Specifications

Interface	
USB	USB2.0 Full-Speed (HID/COM)
RS-232C	300bps to 115200bps (default 9600 bps)

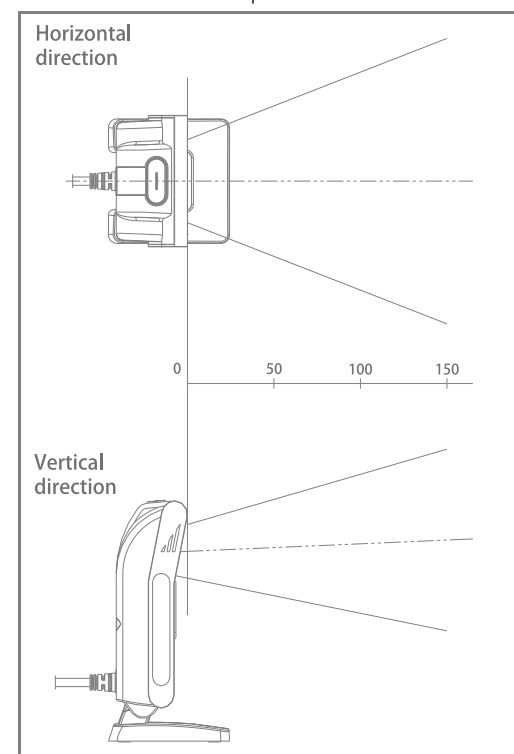
Scanner Section	
Scan Method	Area image sensor (monochrome)
Scanning Light Source	Red LED
Aiming/Detecting Light Source	Green single line LED
Indicator	Blue LED, Buzzer
Field of View (from the front edge of the scanner)	0 mm :Approx. 48 x 31 mm 50 mm :Approx. 85 x 54 mm 100 mm :Approx. 122 x 78 mm 150 mm :Approx. 165 x 105 mm
Supported Symbolgies (1D)	UPC-A, UPC-E, UPC-E1, UPC-A Add-on, UPC-E Add-on, EAN-13, EAN-8, EAN-13 Add-on/EAN-8 Add-on, JAN-8, JAN-13, Code 39, Tri-Optic, NW-7, Industrial 2 of 5, Interleaved 2 of 5, Code 93, Code 128, GS1-128, S-Code, MSI/Plessey, UK/Plessey, TELEPEN, Matrix 2 of 5, Chinese Post Matrix 2 of 5, IATA, Code 11, GS1-Databar
Supported Symbolgies (Postal)	Japanese Postal, Intelligent Mail Barcode, POSTNET, PLANET, Netherlands KIX Code, UK Postal, Australian Postal, Korean Postal Authority code
Supported Symbolgies (2D)	GS1 Composite code, PDF-417, MicroPDF-417, QR Code, MicroQR Code, Data Matrix, Maxi Code, Aztec Code, Codablock F, Chinese-sensible code
1D code	:0.127 mm
PDF-417	:0.169 mm
QR Code	:0.169 mm
Data Matrix	:0.212 mm
PCS	30% or higher

Durability	
Operating Temp.	0 to 40°C
Storage Temp.	-40 to 70°C
Humidity	5 to 90%
Ambient Light Immunity	Fluorescent (indoor) :Max 10,000 Lx Sunlight :Max 10,000 Lx
Shock Endurance	1.5 m
Dust & Drip Proof	IP 52
Static Electricity	15 kV (no destruction)

Power Section	
Operating Voltage	4.5~6.6V
Current Consumption (at 5.0 V)	Peak :420 mA Average :250 mA (Typ) Standby :150 mA (Typ) Sleep :110 mA (Typ)

Physical Features	
Dimensions	(H) 140 x (W) 70 x (D) 76 mm
Weight	Approx. 250 g
Cable Length	Approx. 2.0 m
Case Color	Black or White
Case Material	Antimicrobial (White model only)

Scan Area and Depth of Field



Depth of Field		
Code	Resolution(mm)	Distance (mm)
Code 39	0.127	35 ~ 60
Code 128	0.2	0 ~ 120
UPC/EAN	0.33	0 ~ 170
PDF-417	0.254	0 ~ 120
QR Code	0.381	0 ~ 120
Data Matrix	0.254	30 ~ 80

※ Specific code test samples are used for the DOF measurement.

Default Settings

-USB-HID Keyboard Interface



「Default」

Make sure the USB cable is connected to the scanner when using the USB-HID keyboard interface.

Change interface to USB-HID and reset to factory default



「Basic Settings」

「Keyboard language」

USA	Swedish
UK	Finnish
German	Danish
French	Norwegian
Italian	Czech
Spanish	Russian Cyrillic
Portuguese	Chinese Simplified
Swiss(French)	Chinese Traditional
Swiss(German)	Korean
Dutch	Japanese
Belgian	

-USB-COM Interface

「Default」

Make sure the USB cable is connected to the scanner when using the USB-COM interface

Change interface to USB-COM and reset to factory default



* USB-COM driver must be installed for the use of USB-COM.

-RS-232C Interface

「Default」

Make sure the RS-232C cable with D-SUB connector is connected to the scanner when using the RS-232C interface.

Change interface to RS-232C and reset to factory default



Basic Operation Settings

-Read Options



「Multiple Read Reset Time」

Set the time interval to prevent reading of the same code.

0.1 sec	1 sec
0.4 sec	1.3 sec
0.7 sec	Disable multiple read reset time

「Auto Trigger Detection Sensitivity」

Set the detection sensitivity for auto trigger.

Low	High
Middle	

「Transition Time to Sleep Mode」

Set the time to shift into sleep mode which saves auto trigger power consumption.

10 sec	5 min
1 min	60 min

「Read Time Adjustment」

Adjust the time to end the auto trigger scanning.

Short	Long
Normal	

「Aiming Time with Trigger Switch」

Set the time of green single line aiming lighting up per a single press of the trigger switch.

1 sec	5 sec
3 sec	

-Enable / Disable QR code

「Enable / Disable QR code Reading」

SET	
Enable QR code	
Disable QR code	
END	

-Settings for Label Media

「LCD-Priority Read」

When codes on LCD screen are mainly read, the 'LCD priority mode' below is recommended.

Paper priority mode	LCD priority mode
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-Indicator

「Buzzer Loudness」

Set the buzzer loudness.

Minimum 5%	Loud 50%
Normal 25%	Maximum 100%

「Buzzer Duration」

Set the good read buzzer duration

50 msec	100 msec
75 msec	200 msec

「Buzzer Tone」

Set the good read buzzer tone.

Low 1000 Hz	Middle-high 3000 Hz
Middle-low 2300 Hz	High 3500 Hz
Middle 2650 Hz	2-tone High → Low

* The middle (2600 Hz) is the most resonant tone.

「Enable/Disable Startup buzzer」

Set whether to activate a single buzzer after the scanner is supplied with power.

ON	OFF
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「Enable/Disable Intermediate buzzer」

Set whether to activate the intermediate buzzer that sounds during simultaneous reading of multiple codes, such as concatenated codes.

ON	OFF
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「Good Read LED duration」

Set the lighting time for the good read LED indicator.

200 ms	400 ms
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Contact

Please contact OPTICON or your local dealer.

The Netherlands	Opticon Sensors Europe B.V. tel: +31 (0)23-5692700 / email: sales@opticon.com	Sweden	Opticon Sensors Nordic AB tel: +46 (0)8-58548560 / email: sales.se@opticon.com
U.S.A.	Opticon Inc. tel: 800-636-0090 / email: opticon@opticonUSA.com	United Kingdom	Opticon Limited tel: +44 (0)1582-635100 / email: sales@opticon.co.uk
France	Opticon S.A.S. tel: +33 (0)1-41461260 / email: opticon@opticon.fr	Taiwan	Opticon Far Eastern Ltd. tel: +886 2-27597444 / email: taiwan@opticon.com
Germany	Opticon Sensoren GmbH tel: +49 (0)6074-91890-0 / email: sales.de@opticon.com	China	Opticon Sensors Europe B.V. Shanghai Representative Office tel: +86 21-64480881 / email: china@opticon.com
Italy	Opticon s.r.l. tel: +39 (0)051-6321800 / email: opticon@opticonitalia.it	Australia	Opticon Sensors Pty. Ltd. tel: +61 (0)2-43402666 / email: sales@opticon.com.au
Spain	Opticon Sensores S.L. tel: +34 (0)902-747469 / email: info@opticon.es	Brazil	Opticon Sensors Europe B.V. Latin American Office tel: +55 11-5081 2088 / email: sales.la@opticon.com

More product details, additional support, and configuration options (from the Universal Menu Book) are available at www.opticon.com.