USER MANUAL

KBR2D

CUSTOM®

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UNLESS OTHERWISE SPECIFIED, THE INFORMATION GIVEN IN THIS MANUAL
ARE REFERRED TO ALL MODELS IN PRODUCTION AT THE ISSUE DATE OF THIS DOCUMENT.

GENERAL INSTRUCTIONS

CUSTOM S.p.A. declines all responsibility for accidents or damage to persons or property occurring as a result of tampering, structural or functional modifications, unsuitable or incorrect installations, environments not in keeping with the equipment's protection degree or with the required temperature and humidity conditions, failure to carry out maintenance and periodical inspections and poor repair work.

GENERAL SAFETY INFORMATION

Your attention is drawn to the following actions that could compromise the characteristics of the product:

- Read and retain the instructions which follow.
- Follow all indications and instructions given on the device.
- Make sure that the surface on which the device rests is stable. If it is not, the device could fall, seriously damaging it.
- Do not fix indissolubly the device or its accessories such as power supplies unless specifically provided in this manual.
- When positioning the device, make sure cables do not get damaged.
- Before any type of work is done on the machine, disconnect the power supply.
- Take care the operating temperature range of equipment and its ancillary components.
- Do not block the ventilation openings.
- Do not insert objects inside the device as this could cause short-circuiting or damage components that could jeopardize printer functioning.
- Do not carry out repairs on the device yourself, except for the normal maintenance operations given in the user manual.
- The equipment must be accessible on these components only to trained, authorized personnel.
- Periodically perform scheduled maintenance on the device to avoid dirt build-up that could compromise the correct, safe operation of the unit.
- Do not look dirctly into LED beam or reflectd led bearn from a mirrored surface, it may cause pain.
- Unplug or turn off the devce be sure to stop the led beam before cleaning the portion of the device where LED light in generated and received (emitter/receiver). Otherwise, exposure may cause pain.

CE THE CE MARK AFFIXED TO THE PRODUCT CERTIFY THAT THE PRODUCT SATISFIES THE BASIC SAFETY REQUIREMENTS.

The device is in conformity with the essential Electromagnetic Compatibility and Electric Safety requirements laid down in Directives 2014/30/EU and 2014/35/EU.
The device is in conformity with the essential requirements laid down in Directives 2014/53/EU about devices equipped with intentional radiators
The Declaration of Conformity and other available certifications can be downloaded from the site www.custom4u.it.



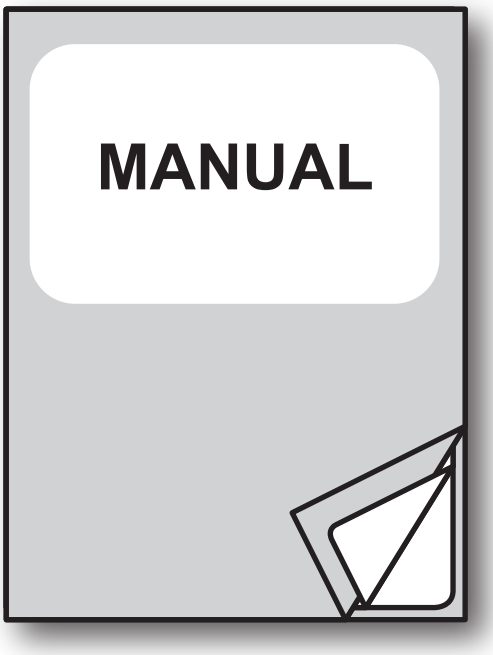
GUIDELINES FOR THE DISPOSAL OF THE PRODUCT

The crossed-out rubbish bin logo means that used electrical and electronic products shall NOT be mixed with unsorted municipal waste. For more detailed information about recycling of this product, refer to the instructions of your country for the disposal of these products.

- Do not dispose of this equipment as miscellaneous solid municipal waste, but arrange to have it collected separately.
- The re-use or correct recycling of the electronic and electrical equipment (EEE) is important in order to protect the environment and the wellbeing of humans.
- In accordance with European Directive WEEE 2012/19/EU, special collection points are available to which to deliver waste electrical and electronic equipment and the equipment can also be handed over to a distributor at the moment of purchasing a new equivalent type.
- The public administration and producers of electrical and electronic equipment are involved in facilitating the processes of the re-use and recovery of waste electrical and electronic equipment through the organisation of collection activities and the use of appropriate planning arrangements.
- Unauthorised disposal of waste electrical and electronic equipment is punishable by law with the appropriate penalties.



The format used for this manual improves use of natural resources reducing the quantity of necessary paper to print this copy.



For details on the commands,
refer to the manual with code **0577200M000063**

For details on the configuration,
refer to the manual with code **0577200M000064**

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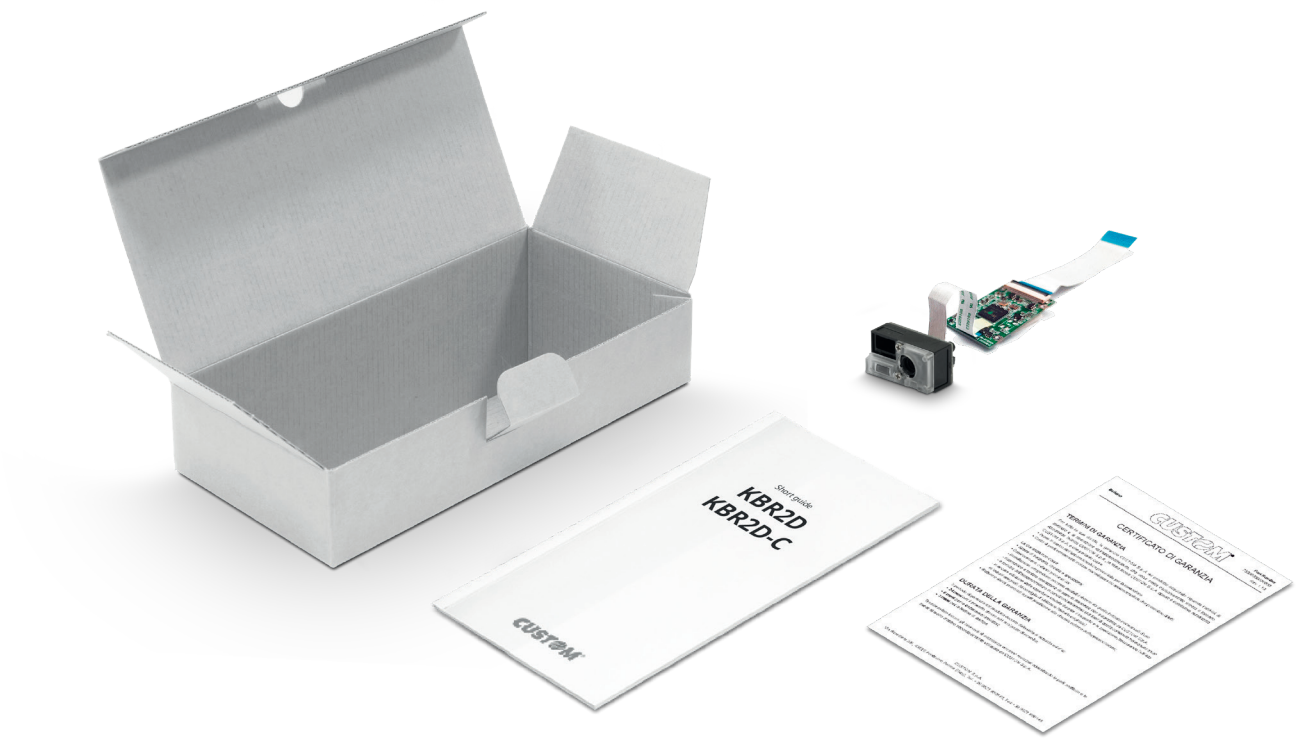
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1 DESCRIPTION

1.1 Box content

Remove the device from its carton being careful not to damage the packing material so that it may be re-used if the device is to be transported in the future.
Make sure that all the components illustrated below are present and that there are no signs of damage. If there are, contact customer service.

- Device
- Documentation (Short guide, warranty sheet)



- Open the device packaging.
- Take out the device.
- Take out the rest of the content.
- Keep the box, trays and packing materials in the event the device must be transported/shipped in the future.

2 READABLE SYMBOLOGIES

2.1 1D symbologies

1D SYMBOLOGIES	READABLE	DEFAULT ENABLE
UPC-A	v	v
UPC-B	v	v
EAN-8/JAN-8	v	v
EAN-13/JAN-13	v	v
Code 39	v	v
Code 128	v	v
Codabar/NW7	v	v
Interleaved 25	v	v
Industrial 25	v	
Matrix 25	v	
Code 93	v	
China Post	v	
Code 11	v	
MSI/Plessey	v	
Telepen	v	
GS1 Databar Omni-directional	v	
GS1 Databar Limited	v	
GS1 Databar Expended	v	

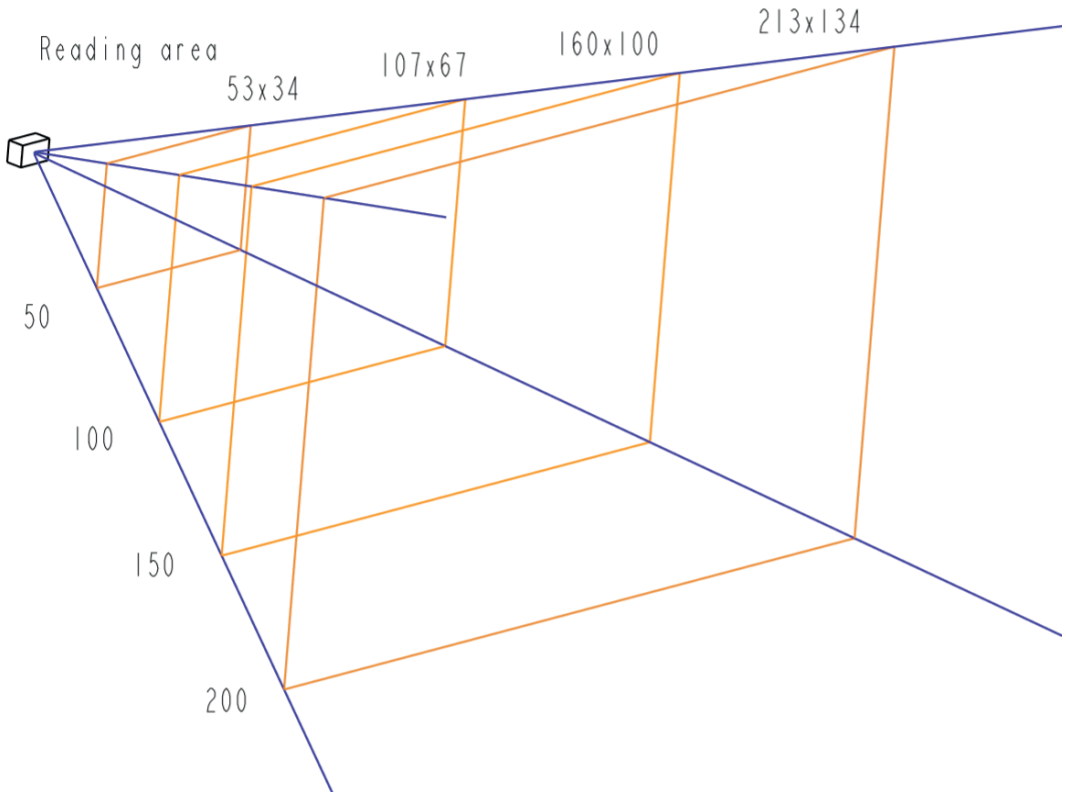
2.2 2D symbologies

2D SYMBOLOGIES	READABLE	DEFAULT ENABLE
Aztec	v	
Data Matrix	v	v
PDF 417	v	v
Micro PDF 417	Optional	
QR Code	v	v
Micro QR Code	v	

3 DEPTH OF FIELD

BARCODE	DEPTH OF FIELD
3mil Code39	from 60 mm to 100 mm
4mil Code39	from 55 mm to 110 mm
10mil Code39	from 50 mm to 220 mm
20mil Code39	from 50 mm to 300 mm
20mil QR Code	from 50 mm to 200 mm
20mil PDF417	from 50 mm to 120 mm

- The test is under ambient light from 700 to 800 Lux.



4 PINOUT

DECODER DATA OUTPUT CONNECTOR

		Reserved		
		Reserved		
	3	GND		System ground
	4	HOST_RXD	IN	RS-232 receive
	5	HOST_TXD	OUT	RS-232 transmit
	6	HOST_CTS	IN	RS-232 Clear to Send control signal
	7	HOST_RTS	OUT	RS-232 Request to Send control signal
	8	Reserved		
	9	BEEPER_OUT	OUT	Pulse width modulated output used to control an external beeper
	10	HOST_DEC_LED	OUT	Active low output used to indicate a valid bar code decode (L= LED ON, H = LED OFF)
	11	Reserved		
	12	HOST_TRIGGER	IN	Used to start a decode session (L = start session, H = inactive)
	13	Reserved		
	14	GND		System ground
	15	Reserved		
	16	GND		System ground
	17	Reserved		
	18	HOST_3P3	IN	+3.3 V power supply
	19	Reserved		
	20	Reserved		
	21	Reserved		
	22	GND		System ground
	23	HOST_USB_P	IN/OUT	Positive differential data signal for the USB bus
	24	HOST_USB_N	IN/OUT	Negative differential data signal for the USB bus
	25	GND		System ground
	26	HOST_5V	IN	+5.0 V power supply
	27	HOST_5V	IN	+5.0 V power supply
	28	Reserved		
	29	Reserved		
	30	Reserved		

Connector type Molex series Name: FD19
30 Pin/Pitch = 0.5 mm /Bottom contact/Right-angle

5 SPECIFICATION

5.1 Hardware specifications

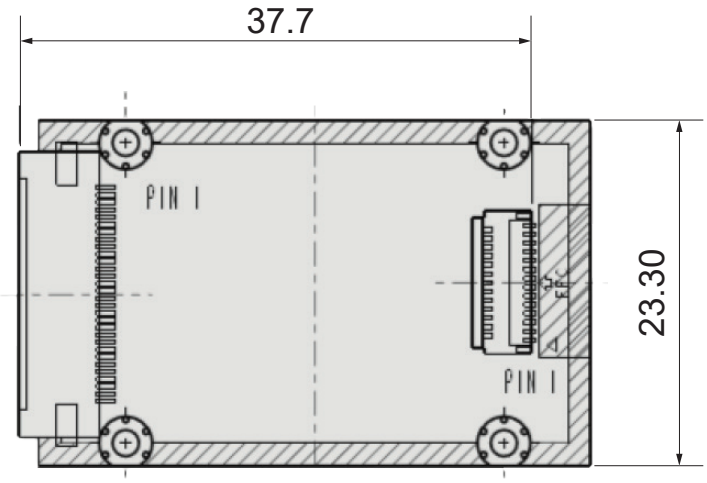
GENERAL	
Light source	white light LED
Sensor	1280 (H) x 800 (V) pixels
Field of view	horizontal: 55° vertical: 35°
Scan rate	60 fps (at full resolution)
Reading distance	300mm@20mil/0.5mm, PCS90%
Print contrast ratio	PCS30%@5mil/0.127mm
Resolution	3mil/0.076mm@PCS90% Code39, 8mil/0.2mm@PCS90% QRCode
Reading angle	(test conditions : Code 39, 10mil/0.25mm,PCS90%)
Pitch angle	from 5° to 60° (±5°)
Skew tolerance	from 5° to 60° (±5°)
Ambient light	lux max. 100000
ELECTRICAL SPECIFICATIONS	
Supply voltage	5 Vdc ± 5%
Current drawn	
Standby consumption	40 mA ±10%
Typical consumption	380 mA ±10%

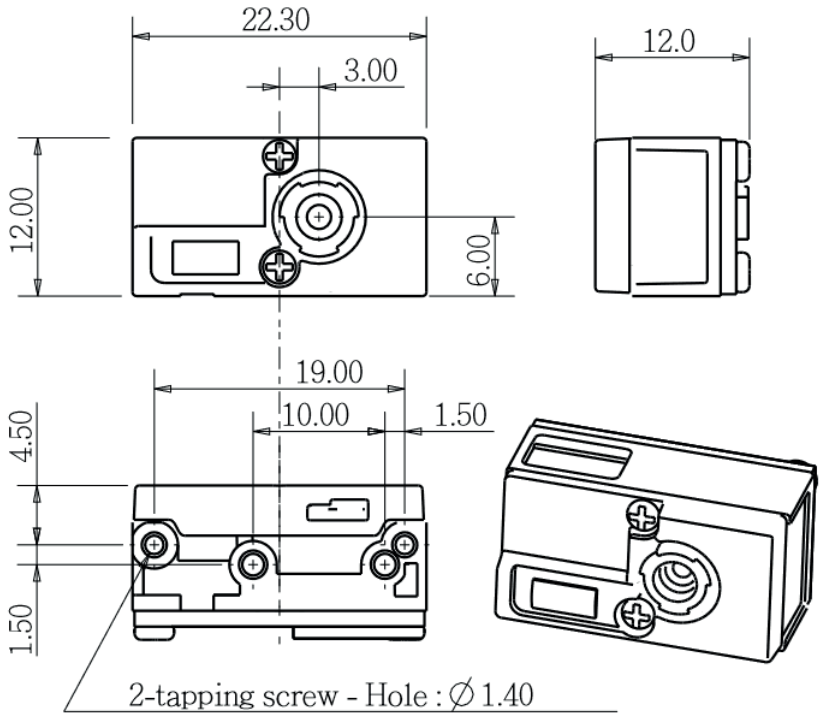
RELIABILITY	
Life time	50000 hours
Thermal shock	.
Temperature	higt: 60 °C (140 °F) low: -20 °C (-4 °F)
Cycle time	30 min. for high temperature 30 min. for low temperature
Cycles	24 cycles
Mechanical shock	2000 G, 0.7 ms, 3 axes
ENVIRONMENTAL CONDITIONS	
Operating temperature	from 0 °C to 50 °C (from 32 °F to 122 °F)
Storage temperature	from -20 °C to 70 °C (from -4 °F to 158 °F)
Relative humidity (RH)	from 5% to 95% (without condensation)

5.2 Device dimensions

All the dimensions shown in following figures are in millimetres.

Depth	12 mm
Height	12 mm
Width	22.3 mm
Weight	2.8 g





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