

SPECIFICATION

Customer : _____

Customer's Model No. : _____

Model No. : SD2000 Series _____

Date : _____

Sample Serial No. : _____

Spec. Version & Revision Date: V01 2006.03.21 _____

Received/Approved by



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Revision History

Version	Date	Context
V00	2004.04.22	Golden release
V01	2006.03.21	

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A. General Description

This brand-new designed handheld CCD scanner has inherited the characteristic of “ high performance with low price” from its previous series. Aside from the principle of excellence mechanical design, it also installs with many user-friendly operations; extra-large trigger enable user to access the trigger in any scanning position, detachable cable, 4-in-1 interface, and 2 years product warranty; these have added-up additional values to it.



As far as the performance, this scanner provides not only scanning depth from contact up to 2 inches, but also being one of the leading supplier in the market supporting scanner to read 2 mil barcode. Recognizing 2 mil-size barcode provides retailer or Jewelry shop an efficient tool to scan label with thin barcode. Collaborating with POS or regular cash register system, user is able to program this device to “continuous mode”. In the future, pricy scanner is not the only option for small/jewelry label barcode.



Aid in various major barcodes, hand-on software-programming function, this economical-type barcode scanner is the best choice ever.

B. Physical Characteristics

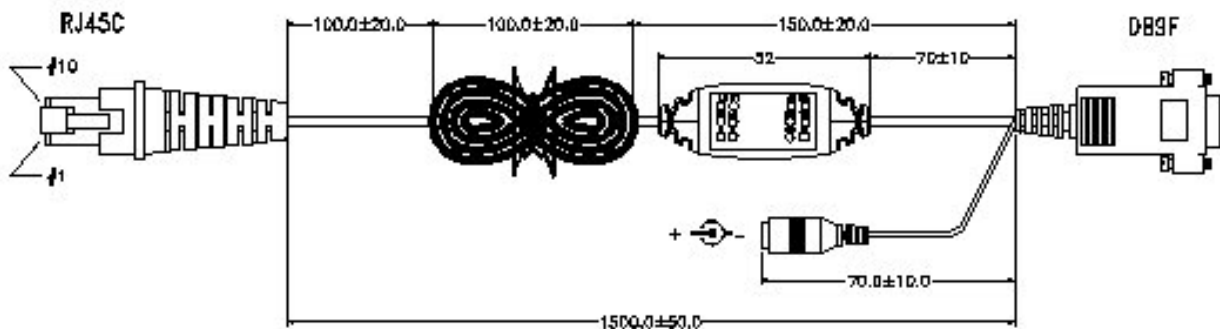
Weight	
Body weight	Approx. 3.82 oz(119 g)(w/o cable)
Material	
	ABS
Connector	
	RJ 45C 10Pins
Dimension	
	166.50 mm X 82.76 mm X 55.07 mm

Cable drawing

Unit : mm

RS232 Interface :

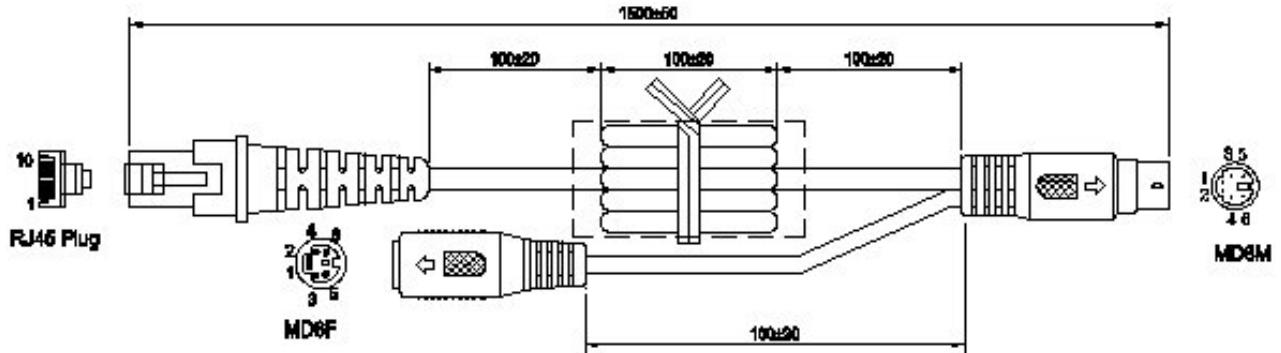
Unit :mm



RJ45C	DB9F	DC-JACK	Function
3	5	Shell	GND
5	9	CORE	DC +5V
7	2		TXD
9	3		RXD
1	8		RTS
10	7		CTS
	Shell		Serial

Keyboard Interface :

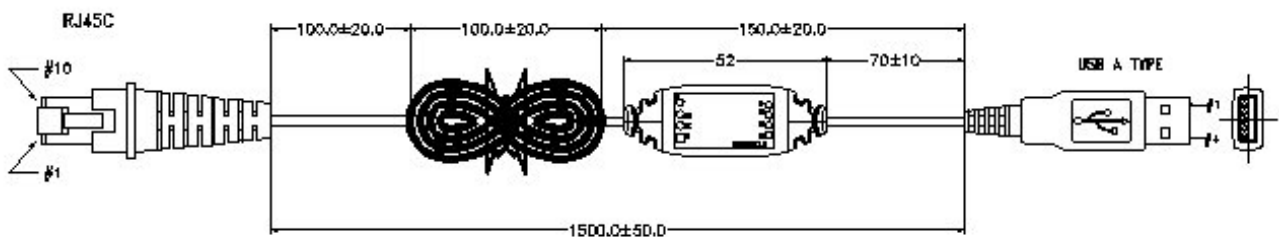
Unit : mm



RJ45C	Mini DIN6M	Mini DIN6F	Function
2	1		HOST DATA
3	3	3	GND
4	5		HOST CLK
5	4	4	Vcc
8		5	KB CLK
8		1	KB DATA
	Shell	Shell	SHIELDING

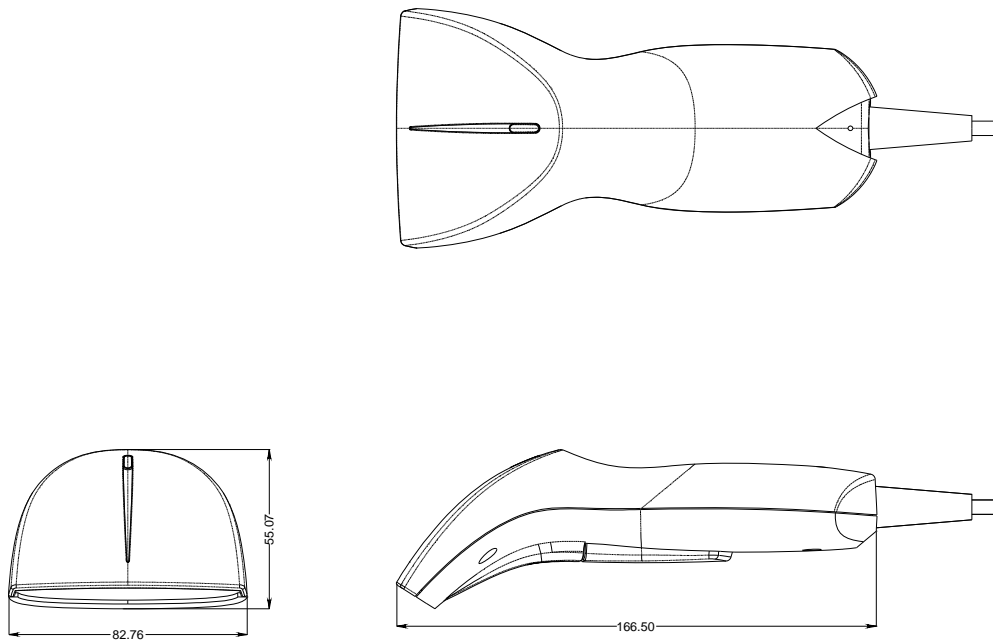
USB Interface :

Unit : mm



RJ45C	Function	USB A TYPE	Function
2	Host DATA	1	DC +5V
3	GND	2	D-
4	Host Clk	3	D+
5	DC +5V	4	GND
	Shielding	Shell	Shielding

Mechanical drawing

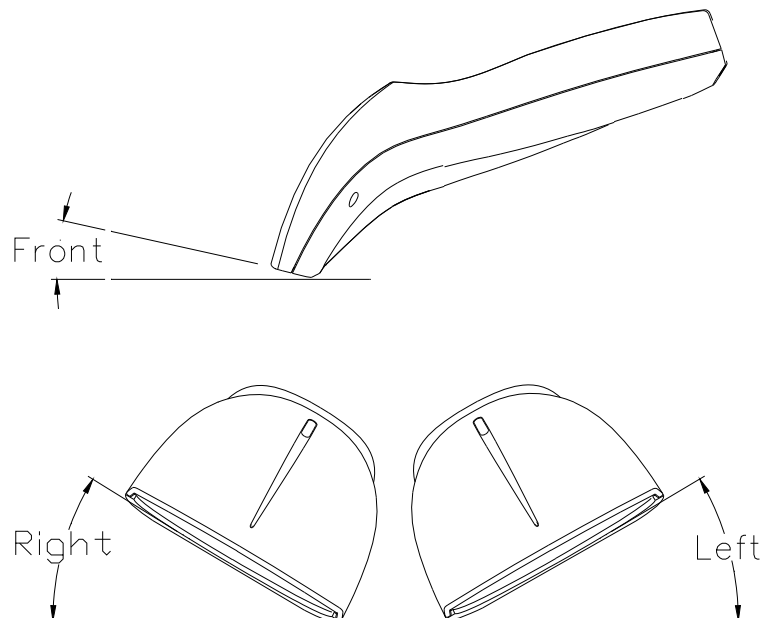


C. Electrical Characteristics

Interface	RS232	KB	USB
Supply Voltage	DC +5V \pm 5%		
Output Voltage (Typ.)	\pm 9V	+5V \pm 5%	+5V \pm 5%
Output low Voltage (Max.)	-	0.7V	0.7V
Current Draw	\pm 10%		
Power On (Typ.)	53 mA	53 mA	53 mA
Stand by (Typ.)	37 mA	33 mA	35 mA

D. Performance

Light Source	Visible Red light 639nm LED
Sensor	Linear CCD Sensor
Processor Type	8051 compatible
Operating Freq.	29.4912 MHz
Scan Rate	75 scans/sec $\pm 10\%$
Reading Distance	50mm@20mil/0.5mm, PCS90%(Contact type)
Width of Field	75 mm
Print Contrast Ratio	PCS45%@4mil/0.1mm
Resolution	4mil/0.1mm@PCS90%
Reading Angle	Test Conditions : Code 39, 10mil/0.25mm, PCS 90%
Forward	$3^{\circ}\sim 38^{\circ}(\pm 5^{\circ})$
Left & Right	$\pm 30^{\circ}(\pm 5^{\circ})$
Ambient Light	
Fluorescent lamp	5000 Lux Max.
Direct sun light	3000 Lux Max.



E. Environmental

Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage Temperature	-20 °C to 70 °C (-4 °F to 158 °F)
Relative Humidity	20% to 95% (Non-condensing)

F. Readable Symbologies

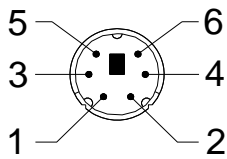
	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	V
Code 39	V	V
Code 39 Full ASCII	V	
Code32 / Italian Pharmacy	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V
Industrial 25	V	
Matrix 25	V	
MSI/PLESSEY	V	
Telepen	V	
Code 93	V	
Code 11	V	
China Postage	V	
GS1 DataBar	V	

G. Pin Assignment

a) Keyboard Interface

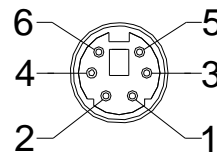
MiniDIN 6 MALE

Pin No.	Function
1	HOST DATA
3	GND
4	Vcc(+5V)
5	HOST CLK



MiniDIN 6 FEMALE

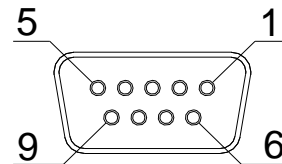
Pin No.	Function
1	KB DATA
3	GND
4	Vcc(+5V)
5	KB CLK



b) RS-232 Interface

DB 9 Female

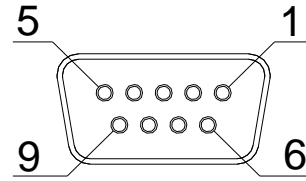
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



c) WAND Emulation Interface

DB 9 Female

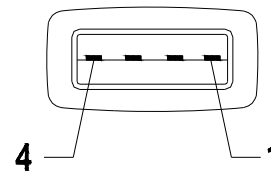
Pin No.	Function
2	DATA
7	GND
9	Vcc



(d) USB Interface

USB A Type Male

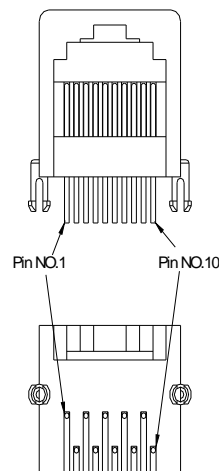
Pin No.	Function
1	Vcc
2	D-
3	D+
4	GND



Decoder Data Output

Type RJ45 10P

Pin No.	Function
1	RTS
2	HOST DATA
3	GND
4	HOST CLK
5	Vcc (+5V)
6	KB CLK
7	TXD
8	KB DATA
9	RXD
10	CTS



H. Reliability

Life Time	
Light Source	40,000 hours
Trigger Switch	1,000,000 times
MTBF(Calculated)	80,000 hours
Thermal Shock	
High Temp.	60 °C (140 °F)
Low Temp.	-20 °C (-4 °F)
Cycle time	20 minutes for high temp. , 20 minutes for low temp.
Cycles	5 cycles
Cable Bending Test	25,000 times minimum (30 times/min @ 500g/90°)
Drop	40 inch(100cm) drop on Concrete Surface

I. Packing

Dimension

Unit	23 cm X 12cm X 7 cm
Carton	50cm X 35 cm X 25 cm

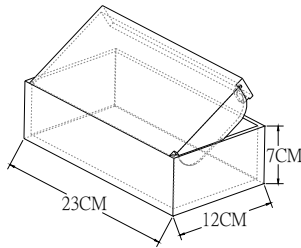
Weight

Unit	337 g
Carton	7.74 Kg (Q'ty :20 pcs)

Storage

Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Humidity	20% to 95% (Non-condensing)

Unit :



Carton :

