

# SPECIFICATION

Customer : \_\_\_\_\_

Customer's Model No. : \_\_\_\_\_

Model No. : SD700 Series \_\_\_\_\_

Date: 2013.06.13 \_\_\_\_\_

Sample Serial No. : \_\_\_\_\_

Spec. Version & Revision Date: E02 2013.06.13 \_\_\_\_\_

Received/Approved by

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**Revision History**

Version	Date	Context
00	2012.05.11	Initial release
01	2012.08.10	Content updated
02	2013.06.13	Scanmap updated

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## **A. General Description**

SD700 is a brand-new handheld slim CCD scanner designed especially for Japan Market. Aside from the characteristics of “high performance, high sensitivities and high stability” inherited from Champtek previous products, it also has much user-friendly design. For example, slim body for female cashier, extra-large trigger enable user to access the trigger easily and 1,000,000-lift-times switch for special industry. In performance, this scanner supports reading depth from contact to 5cm, reading width up to 8 cm on window and 200 scans / per second. It is absolutely the best choice for retailers using POS or regular cash register system. Finally all components are complied with ROHS. It shows the Champtek’s efforts to protect our environments.

## B. Physical Characteristics

### Weight

Body weight                      Approx. 3 oz (85 g, w/o cable)

Material                              ABS

Connector                            Molex P1.25 11P

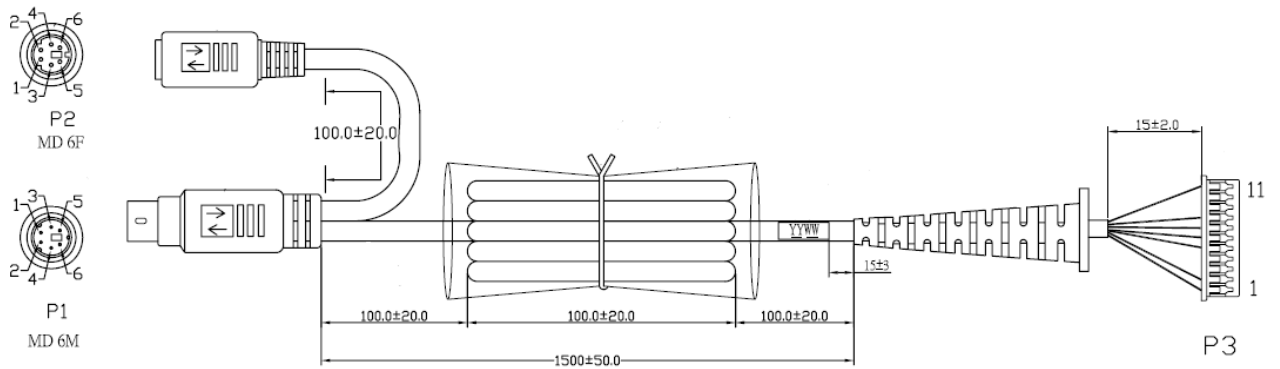
Dimension (LxWxH)                157 x 76 x 22 mm

### 1) Mechanical drawing (Unit: mm)



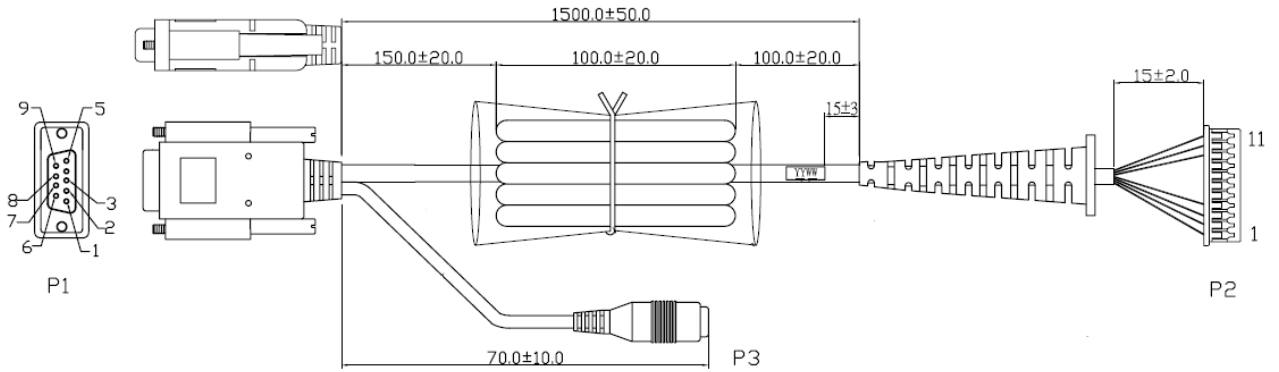
**2) Cable drawing**  
**(Unit: mm)**

**a.KBW Interface**



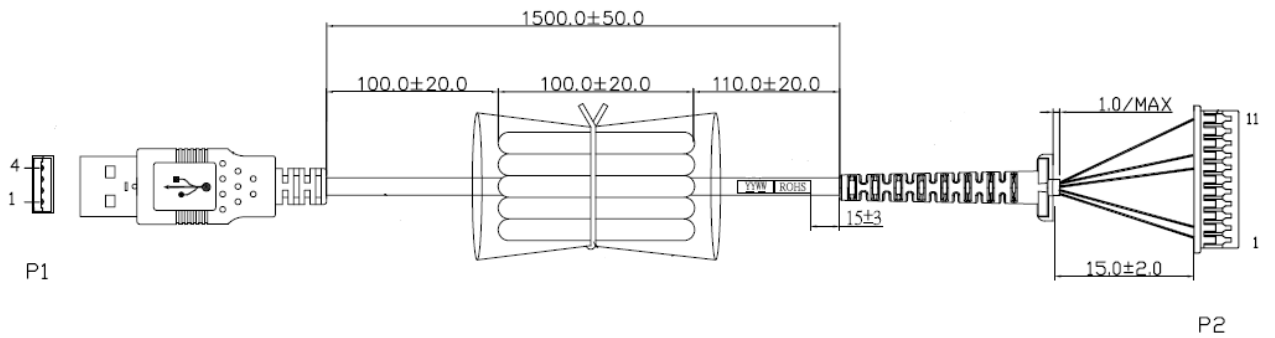
P1 Mini DIN 6M	P2 Mini DIN 6F	Function	Cable Color	P3 MOLEX 11P
3	3	GND	Brown	1
4	4	VCC	Red	2
1		HOST DATA	Green	5
5		HOST CLK	Blue	6
	1	KB DATA	Yellow	7
	5	KB CLK	Orange	8
Iron Case	Iron case	Shielding	Spiral	11

**b.RS232 Interface**



DB9F	Function	Cable Color	DC Jack	MOLEX 11P 1.25 Pitc
5	GND	Brown	Case	1
9	POWER	Red	Core	2
2	TXD	Orange		3
3	RXD	Yellow		4
8	RTS	Green		9
7	CTS	Blue		10
Iron case	Shielding	Spiral		11

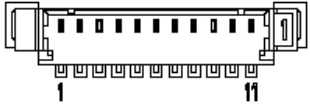
**c.USB Interface**



P1 USB Type A	Function	Cable Color	P2 MOLEX 11P
4	GND	Brown	1
3	D+	Green	7
2	D-	Blue	8
1	VCC	Red	2
Iron case	Shielding	Spiral	11

**d.Decoder Data Output Connector (Molex P1.25 11P Or Compatible)**

Pin No.	Function
1	GND
2	VCC
3	TXD
4	RXD
5	HOST DATA
6	HOST CLK
7	KB DATA /D+
8	KB CLK /D-
9	RTS
10	CTS
11	遮蔽

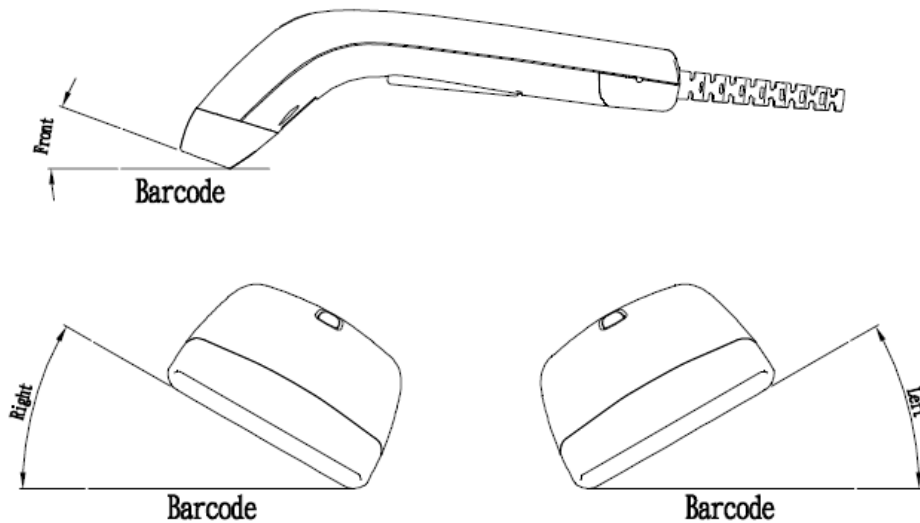

**C. Electrical Characteristics**

Interface	RS232	RS232 TTL Level	KB	USB
Supply Voltage	DC +5V $\pm$ 10%			
Current Draw (Typ.)	$\pm$ 5%			
Power On (Typ.)	120mA	120mA	120mA	120mA
Stand by (Typ.)	20mA	20mA	20 mA	20mA
Operation (Typ.)	120 mA	120mA	120mA	120mA

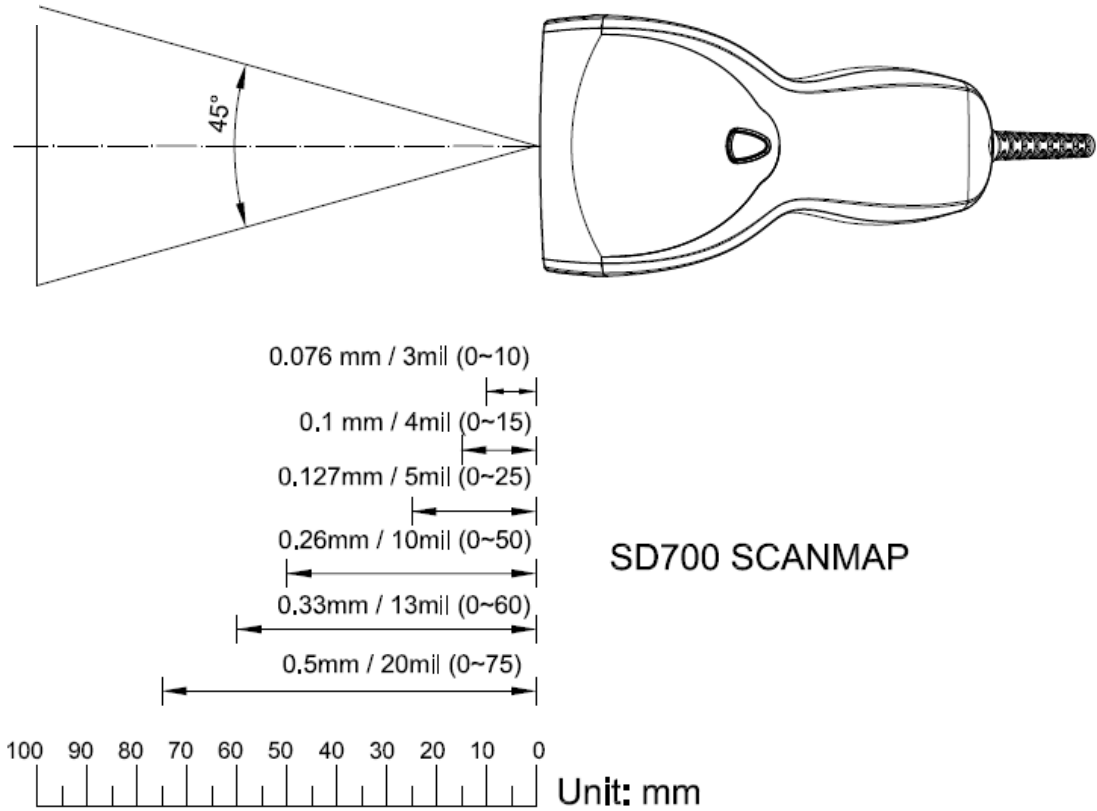


## D. Performance

Light Source	Visible Red light 635nm LED
Sensor	Linear CCD Sensor
Processor Type	32-bits
Operating Freq.	8 MHz (Internal)
Scan Speed	200 scans/ second $\pm 10\%$
Depth of Field	Up to 75mm @ 20mil, PCS90%, Code39
Width of Field (Window)	80 mm
Print Contrast Ratio	30%
Resolution	3mil (0.076mm) @ PCS90%
Ambient Light	20,000 Lux Max
Reading Angle	<i>Test Conditions : Code 39, 10mil/0.25mm, PCS 90%</i>
Forward & Backward	$\pm 10^\circ \sim 30^\circ (\pm 5^\circ)$
Left & Right	$\pm 60^\circ (\pm 5^\circ)$
Indicator	Beeper and LED (Good read Green)



**E. Scan Map**  
(Unit: mm)



**F. 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)

## G. Readable Symbology

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	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	
Code 2 of 6	V	
LCD25	V	
GS1 DataBar Omnidirectional & Stacked	V	
GS1 DataBar Limited	V	
GS1 DataBar Expanded & Stacked	V	

## H. Reliability

<b>Life Time</b>	
Trigger Switch	1,000,000 times
MTBF(Calculated)	50,000 hours
<b>Thermal Shock</b>	
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	47.24 inches (120cm) drop on Concrete Surface

## I. Packing

### Dimension

Unit	23 x 12 x 7 cm
Carton	43 x 35 x 24 cm

### Weight

Unit	0.29 Kg
Carton	6.8 Kg

### Storage

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