

# SPECIFICATION

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

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

Model No. : **LG710 Laser Bar Code Scanner Series**

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

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

Spec. Version & Revision Date: V02 2012.08.24

Received/Approved by

**CHAMPTEK**<sup>®</sup>

[Http://www.champtek.com](http://www.champtek.com)

E-mail : [sales@champtek.com](mailto:sales@champtek.com)

ChampTek Incorporated

5/F, No. 2, Alley 2, Shih-Wei Lane, Chung Cheng Rd.,  
Xindian District, New Taipei City 231, Taiwan

TEL : 886-2-22192385

FAX : 886-2-22192387

## Revision History

Version	Date	Context
V00	2012.02.02	Initial Release
V01	2012.07.25	Built-in MLS1 and autosense function
V02	2012.08.24	Performance revised

## TABLE OF CONTENTS

A. General Description .....	1
B. Physical Characteristics .....	2
C. Electrical Characteristics .....	7
D. Performance .....	7
E. Environmental .....	7
F. Readable Symbologies .....	8
G. Scan Map.....	9
H. Reliability.....	9
I. Packing .....	10

## A. General Description



LG710 is a brand new rugged gun-type laser bar code scanner which is designed especially for retail, logistic and warehousing management market. We include friendly functions with replaceable multiple interface cable options that makes it more easily to be operated by the customers to accommodate itself to user environment.

LG710 has most modern design with rugged casing and supports IP54 sealing protection, supports reading range up to 300 mm for the majority of 1D bar codes and GS1 DataBar™ codes. With LG710 its built-in automatically turn off reading and switch on reading, as it sense a bar code moving in front of it, can extend its lifespan. A stand option can be ordered to facilitate hand-free reading options.

In short, LG710 is a high performance rugged scanner, which provides the customer with the most cost-effective solution in the market. It is perfectly suitable and definitely the best choice for any retail and logistic environment.

## B. Physical Characteristics

### Weight

Body weight                      Approx. 163.4g / 5.77oz

### Material

ABS and Rubber

### Cable Length

5FT. ( 150cm )

### Connector

RJ 45C 10Pins

### Dimension

75 mm W x 71.73mm H x 177.96 mm L

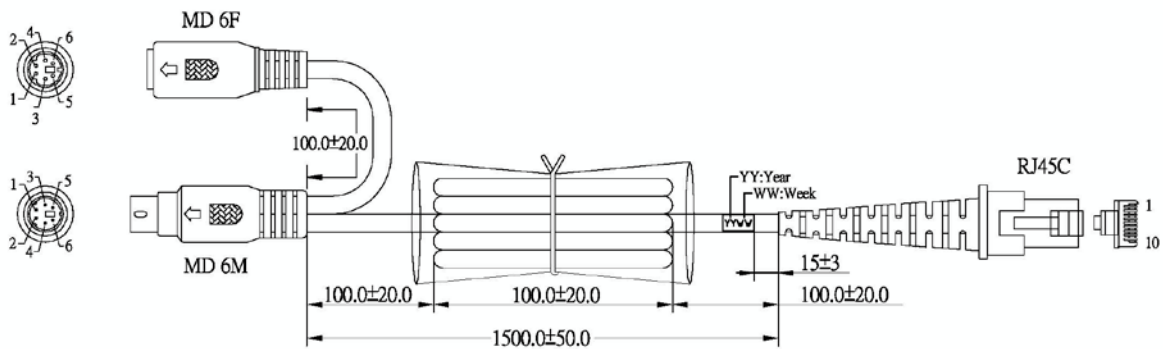
### Color Available

Black (Cap & Grip) / Black(Cap), Beige (Grip)

## Cable drawing

### (1) Keyboard

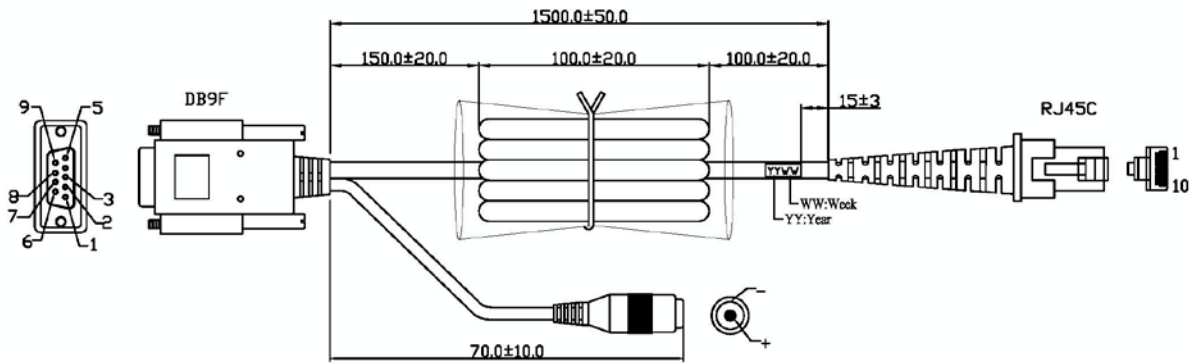
UNIT:mm



MD 6F	MD 6M	RJ45C	FUNCTION	COLOR
2	1		HOST DATA	Green
3	3	3	GND	Brown
4	5		HOST CLK	Blue
5	4	4	VCC	Red
6		5	KB CLK	Orange
8		1	KB DATA	Yellow
Spiral	Shell	Shell	SHELDING	

**(2) RS232**

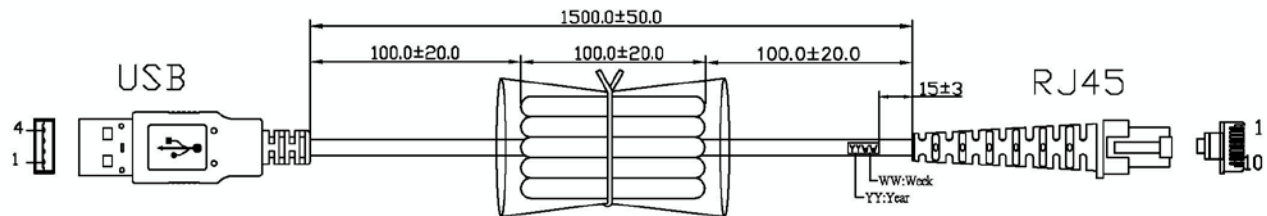
UNIT:mm



DB9F	RJ45C	DC JACK	FUNCTION	COLOR
5	3	Shell	GND	Brown
9	5	CORE	DC +5V	Red
2	7		TXD	Orange
3	9		RXD	Yellow
8	1		RTS	Green
7	10		CTS	Blue
Shell			Spiral	

**(3) USB**

UNIT:mm



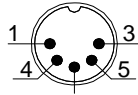
USB	RJ45	FUNCTION	COLOR
1	5	VCC	Red
2	4	D-	Blue
3	2	D+	Green
4	3	GND	Brown
Shell	3	SHIELDING	

## Pin Assignment

### (1) Keyboard Interface

#### DIN 5 MALE

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



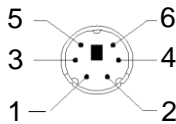
#### DIN 5 FEMALE

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



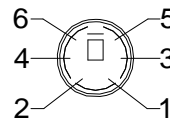
#### MiniDIN 6 MALE

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

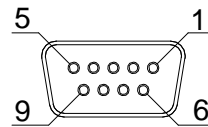


2

### (2) RS-232 Interface

#### DB 9 Female

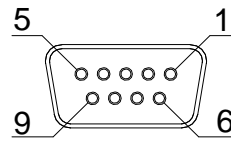
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc/+5V
Power Lead	Vcc/+5V



**(3) WAND Emulation Interface**

**DB 9 Female**

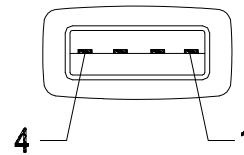
Pin No.	Function
2	DATA
7	GND
9	Vcc



**(4) USB Interface**

**USB A Type Male**

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



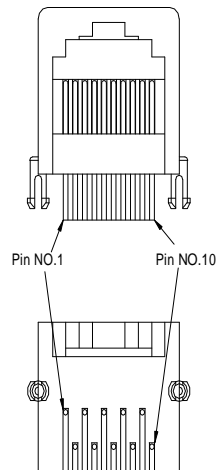
1

**Decoder Data Output**

Type RJ45 10P

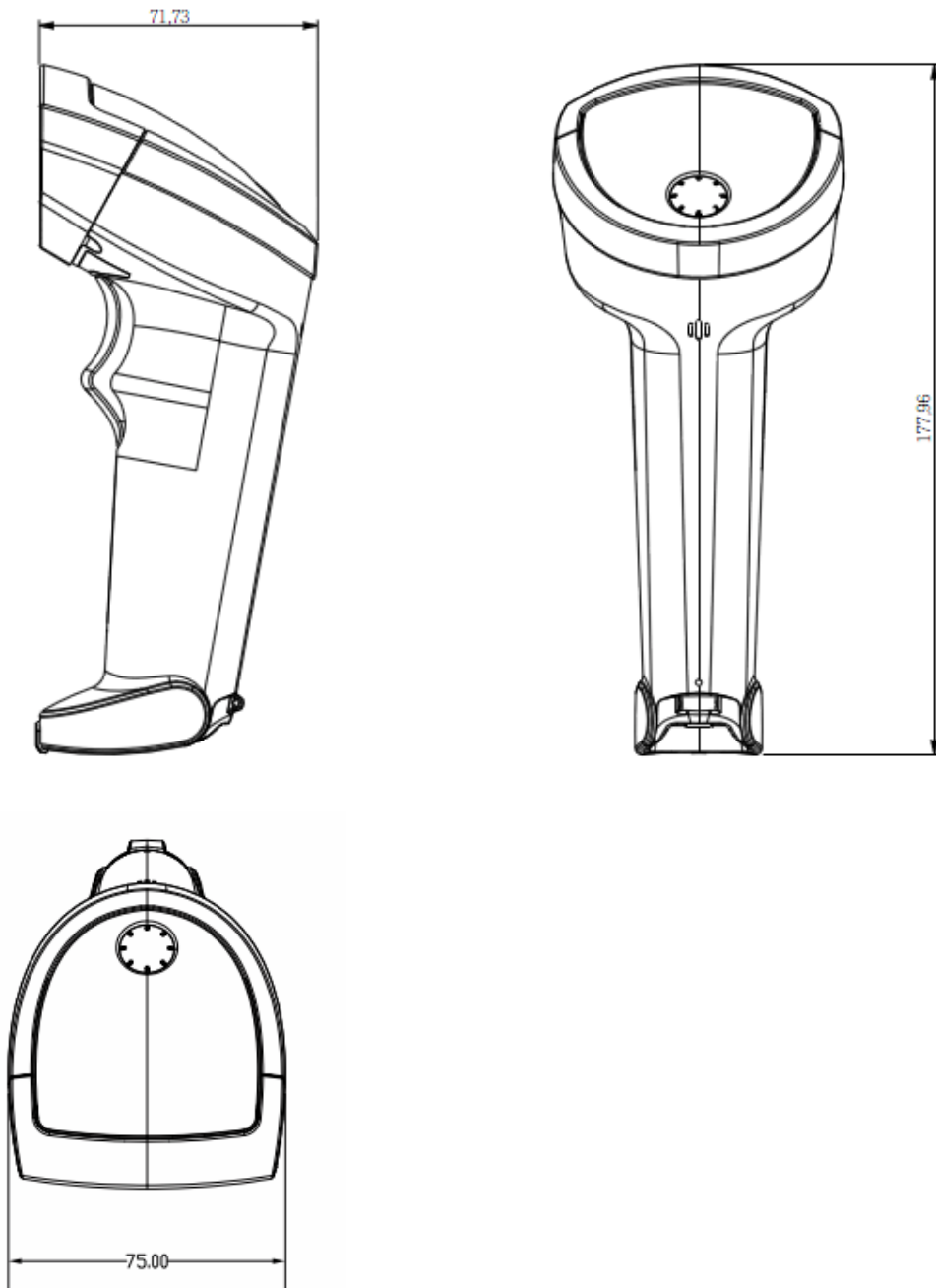
Pin No. Function

1	RTS
2	HOSTDATA
3	GND
4	HOST CLK
5	Vcc (+5V)
6	KB CLK
7	TXD
8	KB DATA
9	RXD
10	CTS





### Scanner Dimension



### C. Electrical Characteristics

Interface	RS232	KB	USB
Supply Voltage		DC +5V ±5%	
Output Voltage (Typ.)	±9V	+5V	+5V
Output low Voltage (Max.)	-	0.7V	0.4V
<b>Current Draw</b>			
Power On (Typ.)	135 mA	135 mA	140mA
Stand by (Typ.)	45 mA	40 mA	45 mA
Operation (Typ.)	65mA	65 mA	65 mA

### D. Performance

Light Source	Visible Laser Diode 650±10 nm
Scan Rate	50 scans per second ± 5%
Reading Distance	Up to 300mm@20mil/0.5mm, PCS90%, Code39
Print Contrast Ratio	30%
Resolution	5mil/0.127mm@PCS90%, Code39
Reading Angle	<i>Test Conditions : Code 39, 10mil/0.25mm, PCS 90%</i>
Forward / Backward	45° / 60°(±5°)
Left & Right	± 10°(±5°)
Ambient Light	5000 Lux Max.( Direct sun light)
Indicator	Beep and LED (Good read Green)

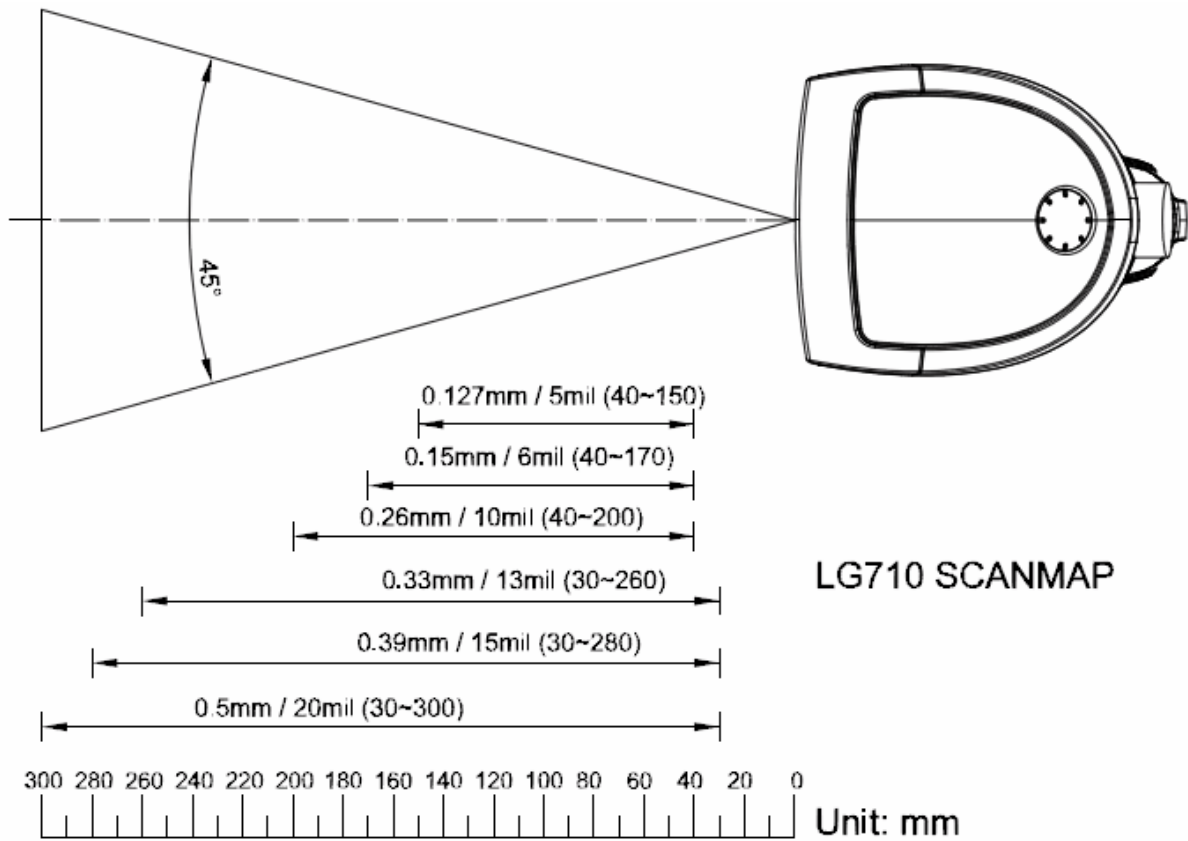
### E. Environmental

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	
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 26	V	
LCD25	V	
GS1 DataBar Omnidirectional & Stacked	V	
GS1 DataBar Limited	V	
GS1 DataBar Expanded & Stacked	V	

### G. Scan Map



### H. Reliability

<b>Life Time</b>	
Trigger Switch	1,000,000 times
MTBF(Calculated)	40,000 hours
<b>Thermal Shock</b>	
High Temp.	50 °C (140 °F)
Low Temp.	-20 °C (-4 °F)
Cycle time	30 minutes for high temp. , 30 minutes for low temp.
Cycles	24 cycles
Cable Bending Test	25,000 times minimum (30 times/min @ 500g/90°)
Drop	59.05 inches (150cm) drop on concrete surface
Sealing	Designed to IP 54 water and dust resistance

## I. Packing

### Dimension

Unit	24 cm X 10.9 cm X 8.6 cm
Carton	57 cm X 37.5 cm X 26.5 cm

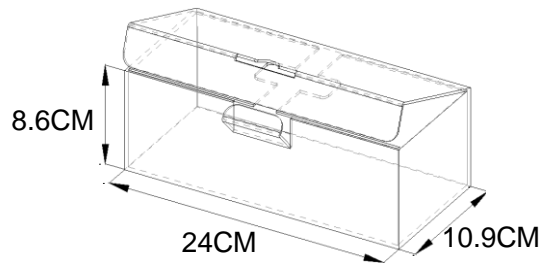
### Weight

Unit	345 g
Carton	8 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:

