

<h1>SPECIFICATION</h1>

Customer : _____

Customer's Model No. : _____

Model No. : BR300 Series _____

Date : _____

Sample Serial No. : _____

Spec. Version & Revision Date: V1.3 2009.09.23 _____

Received/Approved by



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Revision History

Version	Date	Context
1.0	2004.04.22	Golden release
1.1	2005.03.01	
1.2	2006.02.16	

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A. General Description

This slot reader module is well designed and constructed with high quality components. It accepts wide range of reading speed and provides very accurate barcode scanning. With different wavelengths, barcodes which are printed on different materials can be easily read to suit the application needs.

The built-in decoder is an advanced and versatile decoding facility for barcoding systems. It works with variety of bar code types and computer interfaces.



B. Physical Characteristics

Weight

Body Weight 43.2 g (1.52 oz)

Cable Weight Approx. 75 g (2.65 oz)

Material PC&ABS

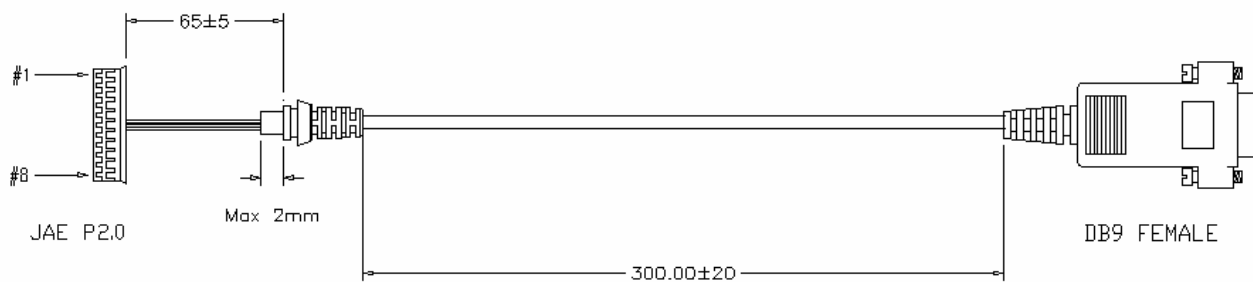
Cable Length Approx. 300 mm (11.8 inch) / 150 cm (59.06 inch)

Dimension 90.00 mm X29.00 mm X 38.00 mm

Cable Drawing

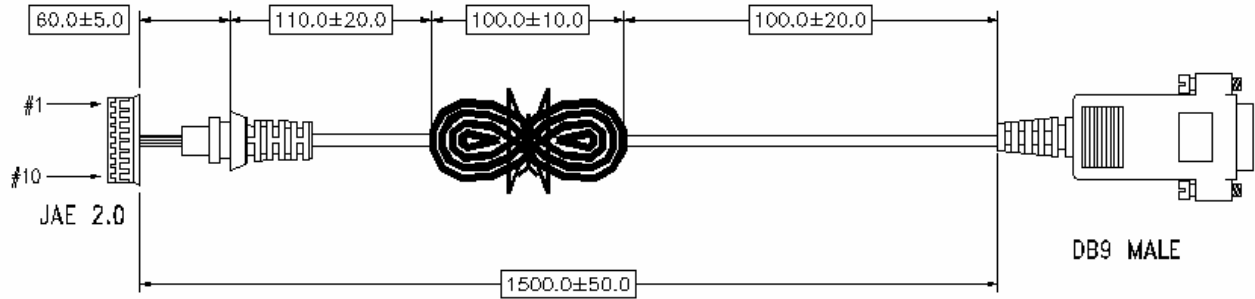
Unit : mm

TTL Interface :

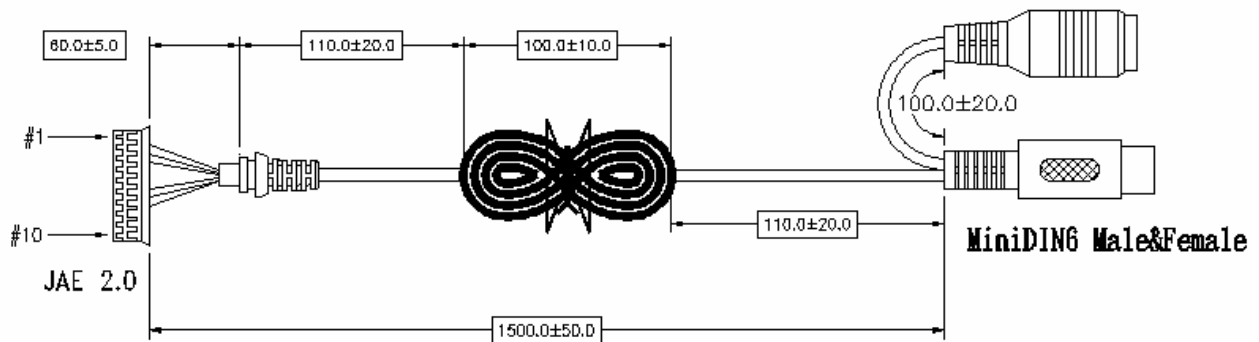


Pin Assignment :

DB9 (F)	JAE P2.0	Function
9	1	+5V
1	2	SOS
2	3	DATA
5	5	Trigger
6	6	Power Enable
7	7	GND
8	8	Sprial

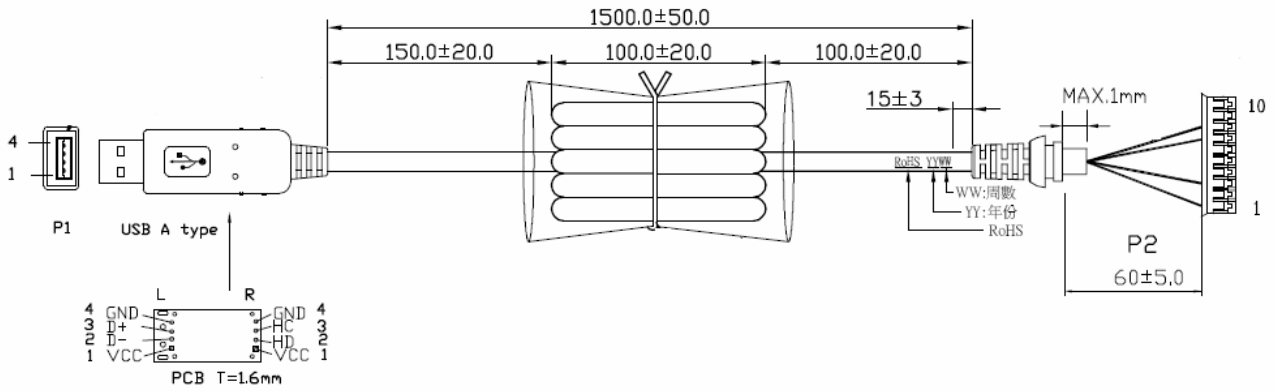
RS232 Interface :**Pin Assignment :**

JAE 2.0	DB9F	Function
1	9	VCC,+5V
4	3	RXD
5	2	TXD
8	5	GND
9	8	RTS
10	7	CTS

Keyboard Interface :**Pin Assignment :**

JAE 2.0	Mini DIN6M	Mini DIN6F	Function
1	4	4	VCC
2		5	KB CLK
3	5		HOST CLK
6		1	KB DATA
7	1		HOST DATA
8	3	3	GND

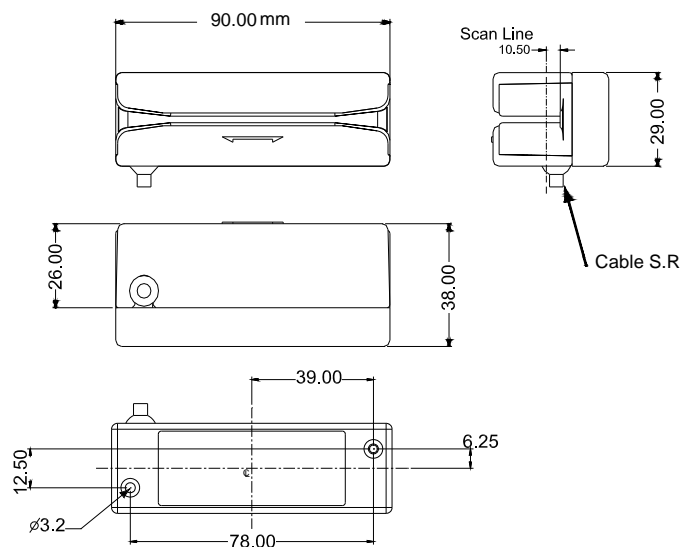
USB Interface :



Wire table				Function		
P1	L	R	Color	P2	P1	P2
1	1	1	green	1	VCC	VCC
2	2	3	brown	3	D-	Host CLK
3	3	2	blue	7	D+	HOST Data
4	4	4	red	8	GND	GND
Iron			shielding	8	shielding	shielding

Mechanical Drawing

Unit : mm



C. Electrical Characteristics

a. BR30X

Interface	RS232	KB	RS232 TTL Level	ABA
Supply Voltage	DC+5V $\pm 5\%$			
Output Voltage (Typ.)	$\pm 9V$	+5V $\pm 5\%$	+5V $\pm 5\%$	+5V $\pm 5\%$
Output low Voltage (Max.)	-	0.4V	0.4V	0.4V
Current Draw	$\pm 10\%$			
Power On (Typ.)	78 mA	60 mA	60 mA	60 mA
Stand by (Typ.)	44 mA	33 mA	35 mA	35 mA
Operation (Typ.)	75 mA	58 mA	58 mA	58 mA

b. BR31X

Interface	RS232	KB	RS232 TTL Level	ABA
Supply Voltage	DC+5V $\pm 5\%$			
Output Voltage (Typ.)	$\pm 9V$	+5V $\pm 5\%$	+5V $\pm 5\%$	+5V $\pm 5\%$
Output low Voltage (Max.)	-	0.4V	0.4V	0.4V
Current Draw	$\pm 10\%$			
Power On (Typ.)	78 mA	58 mA	58 mA	58 mA
Stand by (Typ.)	43 mA	32 mA	32 mA	32 mA
Operation (Typ.)	75 mA	55 mA	55 mA	55 mA

D. Performance

	BR30X	BR31X
Light Source	Visible Red light 632nm LED	Infrared ray 940nm
Sensor	Photo Diode	
Scan Rate	100 - 1000 mm / sec (3.9 - 39 inch / sec)	
Print Contrast Ratio	6mil/0.15mm@PCS90%	
Height Scan Line	10.5 mm / 8.5 mm	
Ambient 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)

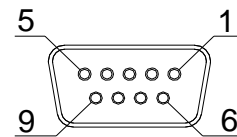
F. Readable Symbologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	V
Code 39	V	V
Code 39 Full ASCII	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V

G. Pin Assignment

(a) TTL Interface(DB 9 Female)

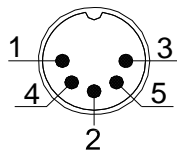
Pin No.	Function
1	S.O.S.
2	DATA
3	N.C.
4	N.C.
5	TRIGGER
6	P. E.
7	GND
8	N.C.
9	+5V



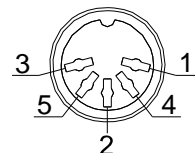
DB 9 Female

(b) Keyboard Interface**DIN 5 MALE**

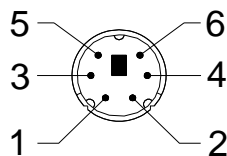
Pin No.	Function
1	HOST CLK
2	HOST DATA
4	GND
5	Vcc(+5V)

**DIN 5 FEMALE**

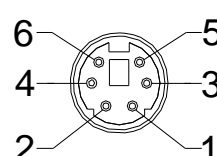
Pin No.	Function
1	KB CLK
2	KB DATA
4	GND
5	Vcc(+5V)

**MiniDIN 6 MALE**

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

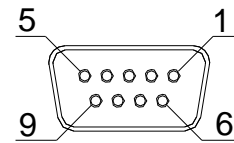
**MiniDIN 6 FEMALE**

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

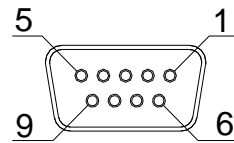


(c)RS232 Interface**DB9 Female with Power Lead**

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

**DB 9 Female****DB9 Female without Power Lead**

Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
9	Vcc (+5V)

**DB 9 Female****H. Reliability****Life Time**

Light Source	40,000 hours
MTBF(Calculated)	26,000 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 °)
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Drop	40 inch (100 cm) Drop on Concrete Surface
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