

SPECIFICATION

Customer : _____

Attention : _____

Model No. :MMR2-620;MMR2-650 _____

Date : _____

Sample Serial No. : _____

RECEIPT STATUS

RECEIVED

Date _____

Signature _____

Title

A. General

This magnetic stripe reader module is well designed and constructed with high quality components. It conforms to ISO 7810-7813 standards and is designed for use in access control, retail and time attendance applications, etc. The TTL output allows the reader to be universally accepted by most decoders. The built-in decoder is an advanced and versatile decoding facility which works with variety of computer interfaces.

B. Models

MMR []- [] [] []- []

Bench Type			
0 : 100 mm Beige			
1 : 100 mm Black			
2 : 90 mm Black			
3 : 90 mm Beige			
Tracks			
1 : 1st Track	2 : 2nd Track	3 : 3rd Track	
4 : 1&2 Tracks	5 : 2&3 Tracks		
6 : 1&2&3 Tracks	7 : JISII		
Interface			
2 : RS232			
5 : Keyboard wedge			
Lift Cycle			
0 : 300,000 passes			
1 : 1,000,000 passes			
Customer Special Requirement Code			

C. General Characteristics

Read/Write	Read
Direction	Bi-direction
Speed	100 - 1000 mm/sec
Lift Cycle	Approx. 300,000 passes (1,000,000 passes is optional)

D. Tracks Information

Track	1	2	3
Standard	IATA	ABA	THRIFT/MINTS
Recording Method	F2F(FM)	F2F(FM)	F2F(FM)
Recording Density	210 BPI	75 BPI	210 BPI
Capacity	79 Characters 7 Bits/Characters	40 Characters 5 Bits/Characters	107 Characters 5 Bits/Characters

E. Electrical Characteristics

	MMR[]-[]2[]	MMR[]-[]5[]
Supply Voltage	DC +5V ± 5%	DC +5V ± 5%
Power Consumption(Typ.)	25 mA	20 mA
Output Voltage(Typ.)	± 9V	+5V
Output Voltage(Min.)	± 5V	4.5V
Output Low Voltage	-----	0.4V
Coercive force	Read 300-4000 Oe Magnetic Stripe	

F. Software Characteristics

Downloadable from PC	Mircrosoft Windows 95/98/NT/2000/XP
Working Frequency	29.4912 MHz
CPU Type	8051 Compatible
Readable Tracks	Conforms to ISO 7810-7813 Standards
Special Feature	Keyboard Emulation
Firmware Version	MR_V3.00.39 2003.02.12
Software Version	S64V3.44

G. Physical Characteristics

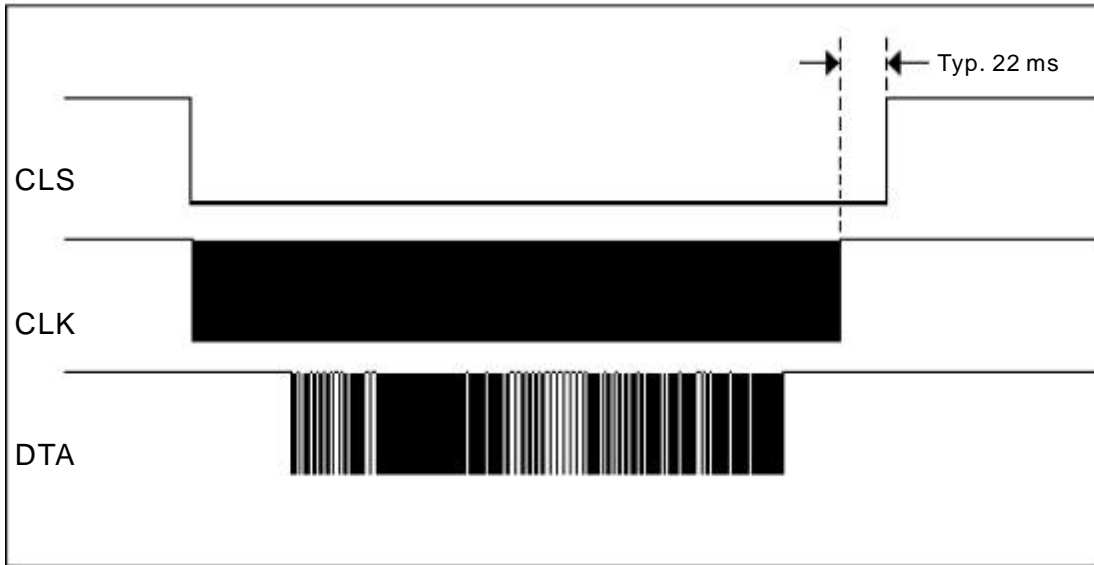
	MMR2-[] [] []
Weight	33g/1.16oz
Body Material	PC & ABS
Cover Weight	16g/0.56oz
Cable Weight	----- Approx. 4 g / 0.14 oz -----
Cable Length	----- 150 mm (5.91 Inch) -----
Decoder Board Weight	----- Approx. 11 g / 0.35 oz -----

H. Environment

For all models	
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	20% to 85% (Non-condensing)

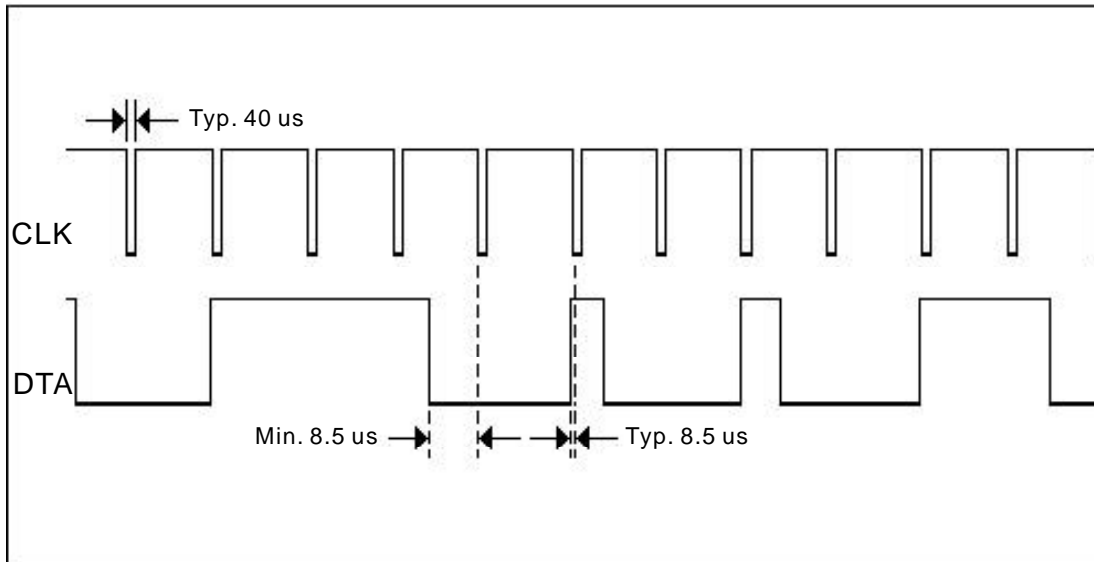
I. Timing Chart

1. Relationship between CLS, CLK and DTA



Note: Margin bits from the card edge are maximum 6 bits.

2. Detail relationship between CLK and DTA

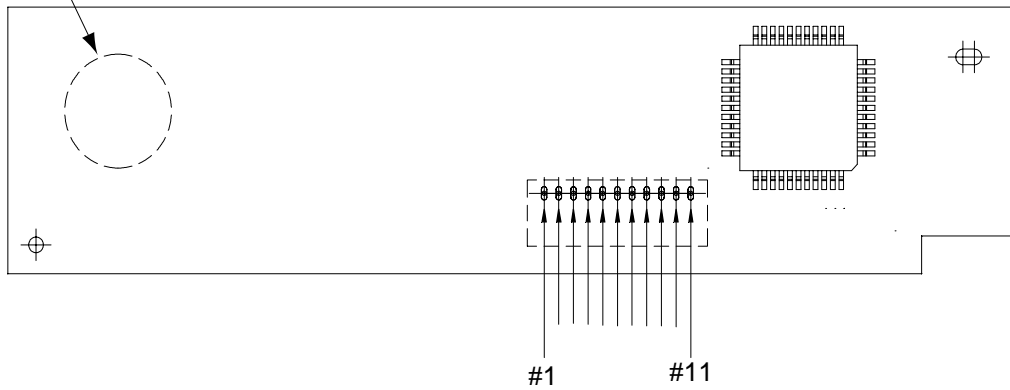


J. Pin Assignment

1. TTL+DECODER Board Output

Function	Wafer(On PCB) JAE P=1.25
GND	1
Vcc(+5v)	2
HOST TXD	3
HOST RXD	4
PC DAT	5
PC CLK	6
KB DAT	7
KB CLK	8
RTS	9
CTS	10
SHIELD	11

BUZZER



K.Dimension

Units:mm

**TTL Interface+Decoder /90 mm Bench/Triple Track
MMR2-600**

