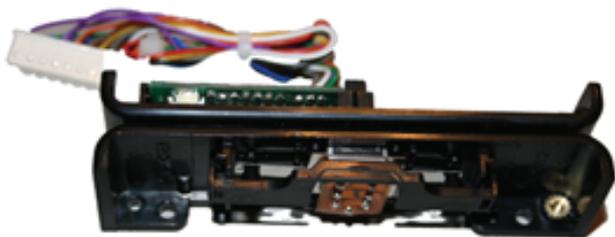


MANUAL SWIPE TYPE MAGNETIC CARD READER
WITH KEYBOARD WEDGE TERMINAL

MODEL:

ePOS MCR for TOUCH VISION 1513



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1. INTRODUCTION

DT-1000 Series is a set of manual swipe type modules that read magnetically encoded data from magnetic stripes that conform to ISO standards and decode them to CPD, RCP, and RDD. This Specification describes the Electrical, operational, Environmental and Mechanical requirements of the DT-1000 Series respectively.

2. SPECIFICATIONS

	d r a d n a t S d r a C 1 1 8 7 0 S I			JIS-II
Track No.	I (IATA)	II (ABA)	III (MINTS)	
Reading Method	F2F (FM)			
Recording Density	210 BPI	75 BPI	210 BPI	210BPI
Recording Capacity	79 Characters (7-bit code)	40 Characters (5-bit code)	107 Characters (5-bit code)	42 Characters (8-bit code)
Card Thickness	0.76 ± 0.08 mm			
Power Supply	5V DC ± 5%			
Power Consumption	Less than 8mA(Single),15m A(Double),20mA(Triple)			
Ripple	Less than 50mVp-p			
Reading Track Width	1.5mm			
Operation Locus	Indoors only			
Card Feeding Speed	10 - 120 cm/sec (4-50 inch/sec)			
Head Life time	min. 500,000 passes			
Error Rate	Less than 0.5%			
Insulation Voltage & Resistance	500 V DC for 1min., 10M Ω or more at 500 V DC (Between ground and frame)			
Weight	Approx. 150g			

3. ENVIRONMENTAL REQUIREMENTS

Operating Temperature and Humidity	0 ÷50 Celsius degree, 20 - 90 % RH
Conservation Temperature and Humidity	-20 ÷50 Celsius degree, 0 - 95 % RH
Vibration	Amplitude 2mm, 2g 10 - 55 Hz/min in XYZ direction
Shock Resistance	Up to 30g, 11msec

4. INTERFACE

Pin No.	ISO2 Track		Triple Track	
	Color	Signal	Color	Signal
1	Red	GND	Red	VCC
2	Red	VCC	Red	GND
3	Green	RDD3	Brown	RDD2
4	Blue	RCP3	Orange	RCP2
5	Yellow	CPD3	Yellow	CPD2
6	Brown	RDD2		
7	Orange	RCP2		
8	Purple	CPD2		
9	Gray	RDD1		
10	White	RCP1		
11	Purple	CPD1		

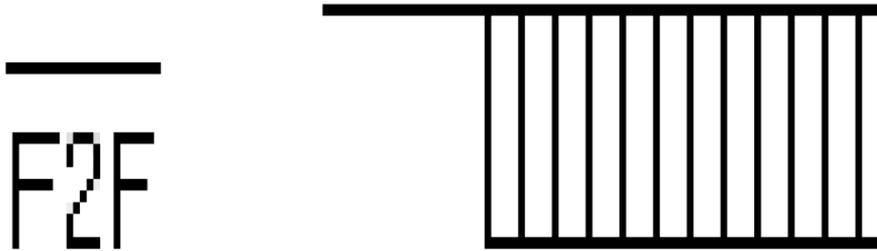
* DEFINITIONS

CPD : Card Present Detect

RCP : Read Clock Pulse

RDD : Read Data

5. TIMING CHART



NOTES :

1. 8 or 9 head flux reversals for low density configuration.
2. TIMEOUT of the CPD signal occurs approx. 25mSec. After last head signal transition.
3. The RDD is valid at 1.4 μ sec(min.) before the negative edge of the RCP.
4. The Low pulse width of RCP is approx. 70% of the bit time.

* RDD

The DATA signal is valid while the RCP is low. If the RDD signal is high, the bit is zero, and if low, the bit is one (1)

* RCP

The RCP signal indicates that RDD is valid. The RDD should be loaded by the user when the RCP signal goes low. (Negative edge)

* CPD

Card Present will go low after the 8 or 9th flux reversal and it will return high when the 25mSec Approx was elapsed. When no card is being moved through the unit, the RDD, RCP and CPD signals are high.

6. SETTING DIP SWITCH

DIP S/W	Function	Description	
S/W1	Sentinel Selection	ON	Start sentinel and End sentinel are used.
		OFF	Not used.
S/W2	Not used		
S/W3	Report Code Selection	ON	Blank Track = nnn Error Track = ~~~
S/W4	ID Code Selection	ON	ISO1 = “%” ISO2 = “?” ISO3 = “^”
S/W5	CR Selection	ON	CR used.
S/W6	Track Selection	Model Selection.	
S/W7			
S/W8			

* When S/W1 is On, SW4 is not used.

* Model Selection

DIP S/W			Description	Model
S/W6	S/W7	S/W8		
ON	OFF	OFF	ISO1 Track Reader	DT-1211
OFF	ON	OFF	ISO2 Track Reader	DT-1221
OFF	OFF	ON	ISO3 Track Reader	DT-1231
ON	ON	OFF	ISO1/2 Track Reader	DT-1251
OFF	ON	ON	ISO2 /3 Track Reader	DT-1261
ON	ON	ON	ISO1/2 /3 Track Reader	DT-1281