

# **SLIM PROFILE CARD GUIDE SWIPE READER TECHNICAL REFERENCE MANUAL**

**Part Number 99875147-5**

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**MAGTEK<sup>®</sup>**

**REGISTERED TO ISO 9001:2000**

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### REVISIONS

Rev Number	Date	Notes
1	22 Oct 99	Initial Release
2	16 Aug 02	Front Matter: Added completely changed agency page. Sec 1: rewrote second paragraph of Configurations, completely revised Specifications. Sec 2: Figure 2-2 added Molex connectors and changed title from "Tracks 1 and 3" to "1 and 2".
3	16 May 03	Front Matter: added ISO line to logo, changed Tech Support phone number, added new warranty statement, changed warranty from 90 days to 1 year; Sec 1, Specifications, power requirements: changed single and dual tracks from 2.4 V to 2.7 V.
4	16 Jul 03	Sec 1, Specifications, card speed, added speed in cm, changed 2.4 V to 2.7V. Sec 2, added 4 headers to Table 2-2.
5	28 Sep 05	Changed configuration to use new MagTek slim rail; added 3-track model; removed electronic specifications; added new Limited Warranty.

## **LIMITED WARRANTY**

MagTek warrants that the products sold to Reseller pursuant to this Agreement will perform in accordance with MagTek's published specifications. This warranty shall be provided only for a period of one year from the date of the shipment of the product from MagTek (the "Warranty Period"). This warranty shall apply only to the original purchaser unless the buyer is authorized by MagTek to resell the products, in which event, this warranty shall apply only to the first repurchase.

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### **FOR OPTIONAL ELECTRONICS - FCC WARNING STATEMENT**

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

### **FOR OPTIONAL ELECTRONICS - FCC COMPLIANCE STATEMENT**

This device complies with Part 15 Of The FCC Rules. Operation of this device is subject to the following two conditions: (1) This device may not cause harmful interference. And (2) This device must accept any interference received, including interference that may cause undesired operation.

### **FOR OPTIONAL ELECTRONICS - CANADIAN DOC STATEMENT**

This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

### **FOR OPTIONAL ELECTRONICS - CE STANDARDS**

Testing for compliance to CE requirements was performed by an independent laboratory. The unit under test was found compliant to Class B.

**UL/CSA**

This product is recognized per Underwriter Laboratories and Canadian Underwriter Laboratories 1950.

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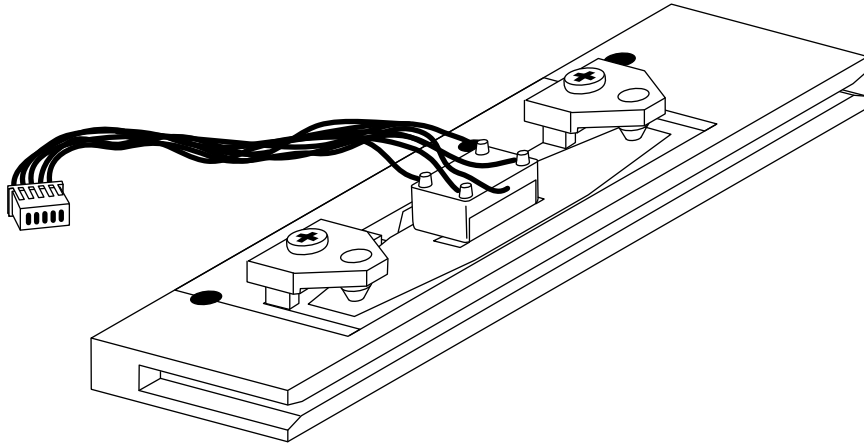
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**Figure 1-1. Slim Profile Reader, Tracks 1, 2**

# SECTION 1. FEATURES AND SPECIFICATIONS

The Slim Profile Card Guide is an OEM Swipe Reader with a TTL level interface and is designed for use in small enclosures - the width is 16mm. The Reader is in compliance with industry specifications, including ANSI/ISO Standards 7810, 7811-1 through -6, 7812, 7813, and AAMVA. The Reader can be customized. Bidirectional read capability is available.

## CONFIGURATIONS

The standard configurations of the Slim Profile Reader are as follows:

Part Number	Description
21047013	Includes card guide; Track 1,2,3 head spring (21052086); No electronics
21047015	Includes card guide; Track 2 head spring (21052019); - No electronics
21047016	Includes card guide; Track 1,2 head spring (21052224); - No electronics

For convenient interface to the application electronics, the MagTek single-track IC (P/N 21006516) with associated components can be installed on the user's own circuit board. Or, for the 2-track and 3-track designs, the MagTek 3-track Delta ASIC (P/N 21006536) can be incorporated into the target design.

## SPECIFICATIONS

Specifications are as follows:

FLAMMABILITY	
Flammability	Meets UL94V-0
ENVIRONMENTAL	
Operating Temperature	-30 °C to 70 °C (-22 °F to +158 °F)
Operating Humidity	10% to 90% relative humidity
Life	300,000 passes Single Track 1,000,000 passes Multi-Track
PHYSICAL	
Dimensions	Length: 3.51" (89.2mm) Height: 1.10" (27.9mm) Width: 0.63" (16.0mm)
Head Cable Length	Single Track: 4.49" (114mm) Dual Track: 2.60" (66mm) Three track: 5.00" (127mm)
Connector	See Section 2, Connectors

**REFERENCE DOCUMENTS**

*I/O Interface for TTL Swipe Readers, Technical Reference Manual, P/N 99875148*

*Triple Track ASIC With Shift-Out, Specifications, P/N 99875259*



## **SECTION 2. INSTALLATION**

This section consists of installation of the Reader models.

### **MOUNTING**

The mounting dimensions for Track 2 are shown in Figure 2-1; for Tracks 1 and 2 in Figure 2-2; and for Tracks 1, 2, and 3 in Figure 2-3.

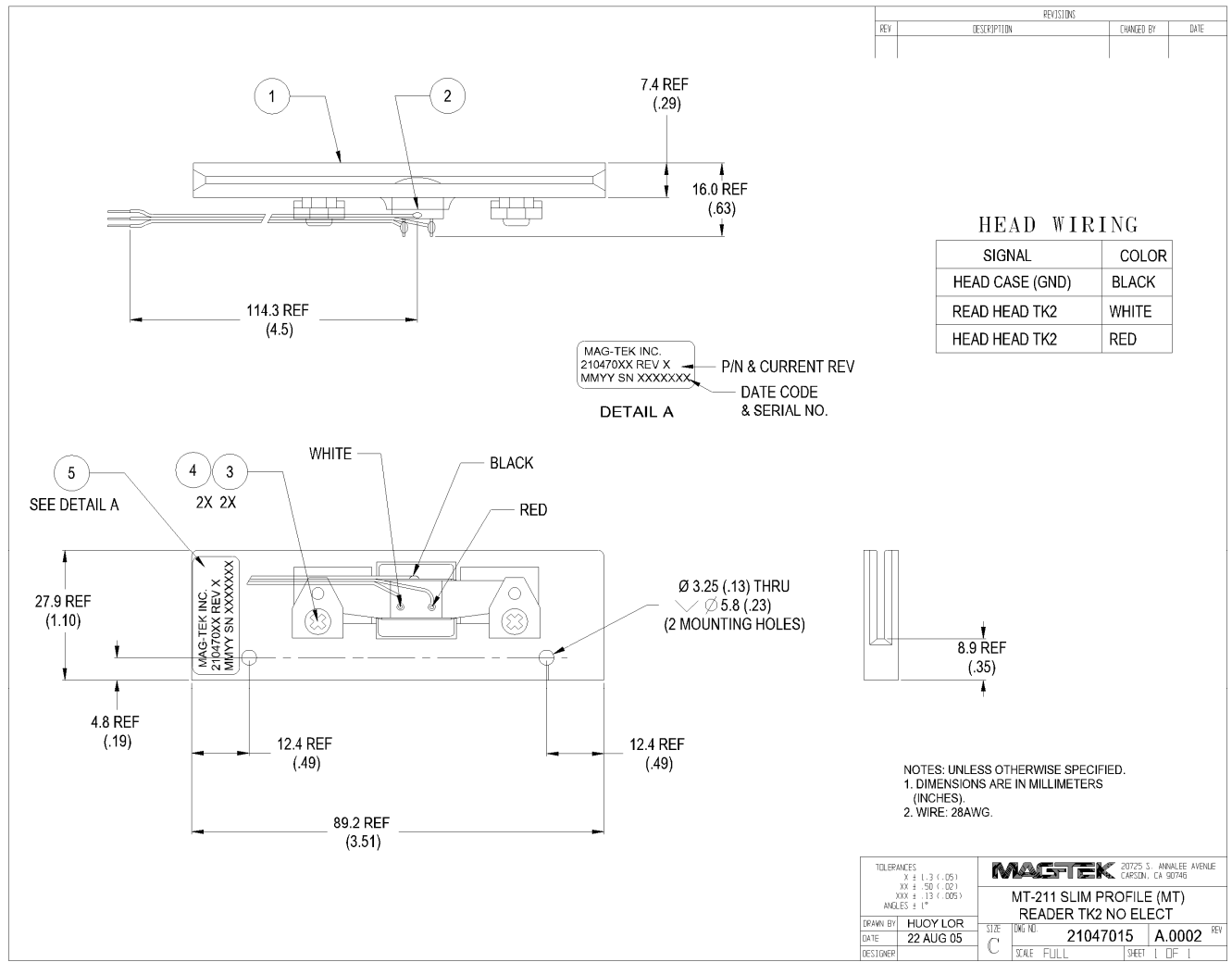


Figure 2-1. Reader Mounting Dimensions, Track 2

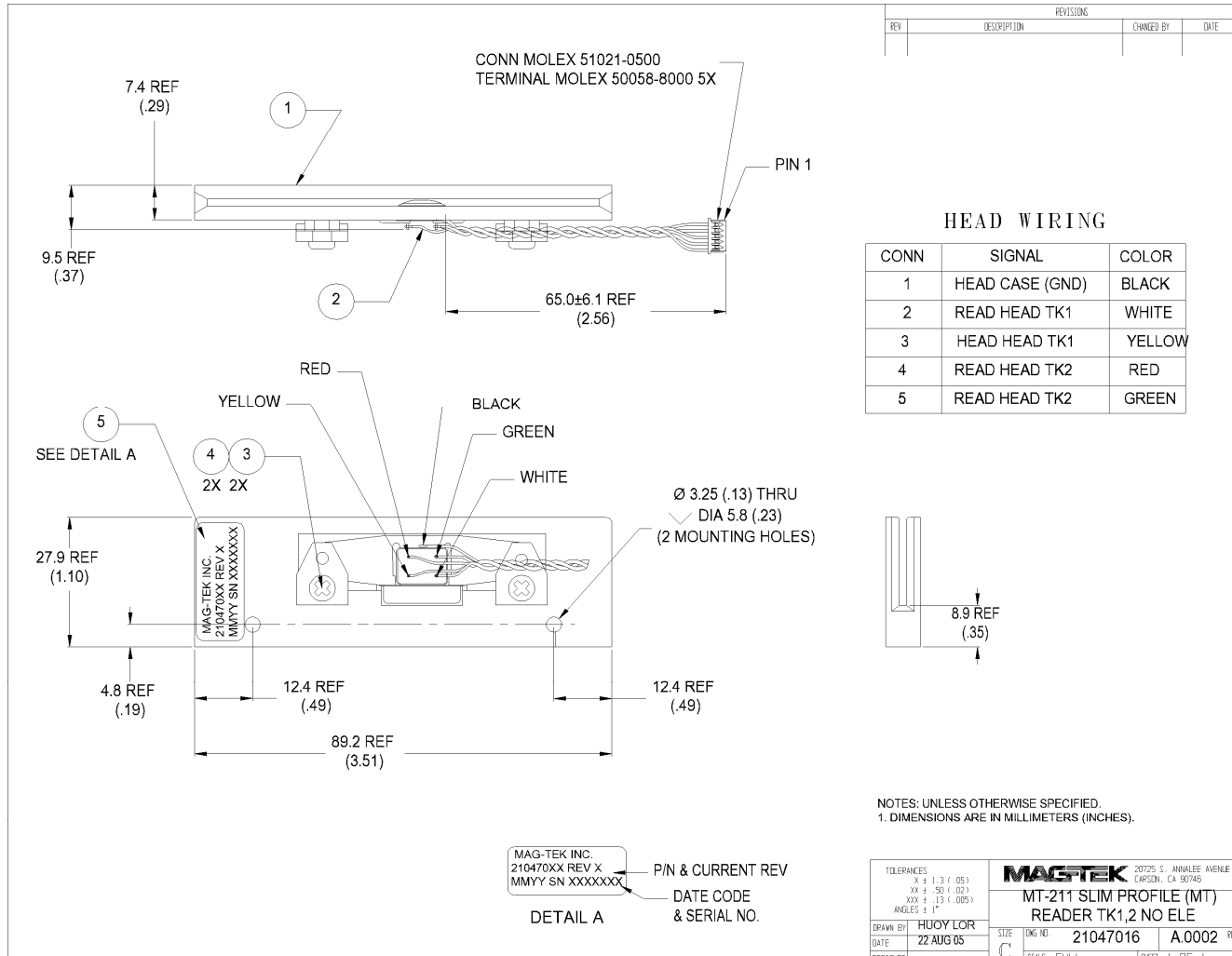
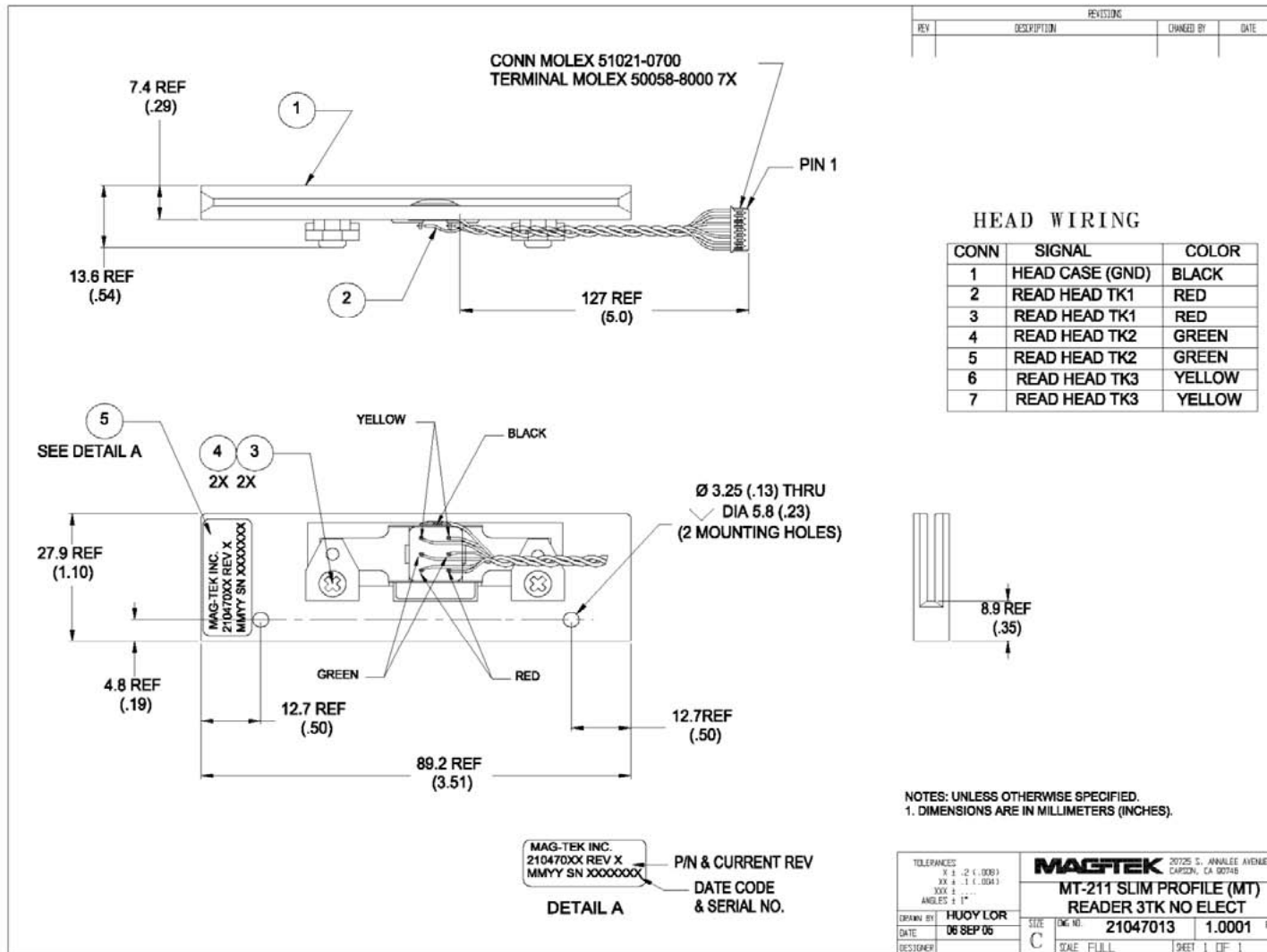


Figure 2-2. Reader Mounting Dimensions, Tracks 1 and 2

**Slim Profile Swipe Readers**



**Figure 2-3. Reader Mounting Dimensions, Tracks 1, 2, and 3**

## CONNECTORS

Head connections for the three models are shown in the tables below.

**Table 2-1. Head Connections for Track 2**

	Signal	Color
Wires Only - No Connector	HEAD CASE GND	Black
	READ HEAD TRACK 2	White
	READ HEAD TRACK 2	Red

**Table 2-2. Head Connections for Tracks 1 and 2**

	Pin Number	Signal	Color
Connector for Dual Track, 5 Pin Molex 51021-0500 1.25 mm Contact Spacing Mates with Headers 53398-0590, 53261-0590, 53047-0510, 53048-0510	1	HEAD CASE (GND)	Black
	2	READ HEAD TK 1	White
	3	READ HEAD TK 1	Yellow
	4	READ HEAD TK 2	Red
	5	READ HEAD TK 2	Green

**Table 2-3. Head Connections for Tracks 1, 2 and 3**

	Pin Number	Signal	Color
Connector for Dual Track, 7 Pin Molex 51021-0700 1.25 mm Contact Spacing Mates with Headers 53398-0790, 53261-0790, 53047-0710, 53048-0710	1	HEAD CASE (GND)	Black
	2	READ HEAD TK 1	Red
	3	READ HEAD TK 1	Red
	4	READ HEAD TK 2	Green
	5	READ HEAD TK 2	Green
	6	READ HEAD TK 3	Yellow
	7	READ HEAD TK 3	Yellow

## **Slim Profile Swipe Readers**

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