

MagTek MSR Configuration	TB000061	REV. B
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Executive Summary

Information and utilities regarding MagTek MSR's and MagTek's USB Swipe and Insert Reader utility. This utility allows a user to send commands that change the device's configuration for both the USB HID and keyboard emulation (Encrypted and Non-Encrypted) MSR's.

Tools Needed

- MagTek MSR
- Windows 7 or above computer
- MagTek USB Swipe & insert Reader PN99510026

This utility will work for Encrypted MSR's and Non-Encrypted MSR's:

https://elotouch.sharepoint.com/:u:/s/KnoxvilleTechnicalServices/EXhO21kMxAZLiy0afCECxvoBak9U3_4GcSnPdrUdpfV1Tg?e=SdFkJ0

- The above MagTek utility can also be found in the AIO peripheral driver packs, and in the peripheral folder of an AIO.
- There is also an MSR configuration utility listed in the Elo Download page, however, it will only support the *Non-Encrypted MSR's*:

Utility version 1.08 to	Utility version 1.08 to access and modify many of the internal	
access and modify many	settings on the MSR (track settings, foreign languages, etc).	mt_msr_config.zip
of the internal settings	Supports MSR's on all touchmonitors and the following	
on the MSR	touchcomputers: 1520L, 1529L and A-series (4.3 MB).	

MSR Information

Non-Encrypted MSR's (Monitor MSR's)

Elo PN's: E500356, E177037, + more.

'MagTek PN's: MSR-INTELLIHEAD-21030006

VID/PID HID: 0801/0002

VID/PID KB: 0801/0001

Encrypted MSR's (X Series, E Series, I Series, PayPoint, Elo POS)

Elo PN's: E001002, E122229

PN's: MSR MODULE, INTELLIHEAD-21030085, ENCRYPT

VID/PID HID (with SureSwipe Factory Defaults): 0801/0011



VID/PID HID (SureSwipe Disabled): 0801/0002

VID/PID KB: 0801/0001

Procedure

- 1. Download and Install the USB Swipe & Insert reader application. This will create an icon on your desktop called 'MagTek USB MSR.
- 2. Double click on the 'MagTek USB MSR icon to start the application.
- 3. The application will open and will identify a connected MSR in either Keyboard mode or HID. Screen shot below showing Keyboard Mode Device detected:



 You can send commands by entering the command manually in the "Send Msg". You can also download a MagTek supplied, or user-created text file by selecting "Load File".



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5. MagTek supplied text files are listed below:

Mr Open				×
🗧 🔶 🕤 🛧 🧧 🔶 🔶	ram Files (x86) > MagTek > USBMSR >	ٽ ~	Search USBMSR	Q
Organize 👻 New folder				· 🔳 🔞
TSC_ELO ^	Name	Date modified	Туре	Size
	Source	4/24/2019 9:43 AM	File folder	
 OneDrive 	Change To HID.txt	7/18/2005 12:02 PM	Text Document	1 KB
	Change To Keyboard.txt	7/18/2005 12:02 PM	Text Document	1 KB
This PC	📄 English (United States) Keyboard Translat	10/17/2007 9:54 AM	Text Document	5 KB
3D Objects	Example Command File.txt	7/21/2005 10:03 AM	Text Document	1 KB
Desktop	French (France) Keyboard Translation.txt	10/16/2007 12:25	Text Document	5 KB
Documents	German (Germany) Keyboard Translation	10/16/2007 12:53	Text Document	5 KB
Downloads	ltalian (Italy) Keyboard Translation.txt	10/16/2007 12:34	Text Document	5 KB
Music	Readme.bt	12/4/2007 8:54 AM	Text Document	14 KB
Dictures	Spanish (Spain) Keyboard Translation.txt	10/16/2007 3:29 PM	Text Document	5 KB
Videos				
Videos				
Windows (C:)	· · · · · · · · · · · · · · · · · · ·			
File <u>n</u> an	ne: *.bd	~	Text (*.bxt)	~
			<u>O</u> pen ▼	Cancel

6. To manually send a command, you will need to type the command in the "Send Msg" line, select Auto Add Length, and click send. In this example, I am sending a command to read Track 1 and Track 2 only:

➡ USBMSR Demo 2.02 (© Copyright 2019 MagTek, Inc.) –		
<u>F</u> ile <u>R</u> escan Set <u>S</u> N Mode On Set Test <u>On</u> <u>F</u> ont <u>H</u> elp		
Swipe card		
Set Focus To Text After Command Response		
Send Message (Hex)		
Send Msg 01 05 05		_
Load From File		
Eleoad at start?	Daumlaas	
Click Load File to load a command file		-
I Decode 'DATA' As ASCII		
🔽 Clear After Read	Clear Dialog	9
Request : CMND=01, LEN=02, DATA=05 05 () Response : RC=00, LEN=00, DATA= ()		^
		\checkmark
Detected Keyboard Mode Device VID/PID = 0801/0001		//

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- 7. After sending any commands, you must send 02 to cycle power to the MSR and to save changes. The device will be redetected by the utility after sending 02.
- 8. To verify that your changes took place, you can send a query command. To see what track data is set on an Encrypted MSR, send 00 05. In the example below, the Response indicates DATA=05, which is track 1 and 2 only:

USBMSR Demo 2.02 (© Copyright 2019 MagTek, Inc.) -	
<u>F</u> ile <u>R</u> escan Set <u>S</u> N Mode On Set Test <u>O</u> n <u>F</u> ont <u>H</u> elp	
Swipe card	
Set Focus To Text After Command Response	
Send Message (Hex)	
Send Msg 01 05 05	
Load From File	
Eleoad at start?	Daumland
Click Load File to load a command file	Download
I Decode 'DATA' As ASCII	0. 0.
Clear After Read	Clear Dialog
Request : CMND=01, LEN=02, DATA=05 05 () Response : RC=00, LEN=00, DATA= ()	^
	~
Detected Keyboard Mode Device VID/PID = 0801/0001	

9. I have listed common commands below for each version of the MSR, but if the customer needs additional programming, you will need to reference the MagTek Technical Reference Documents. All commands must be in HEX. Manuals and Ascii table below:





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Common Commands

Encrypted MSR

Get Serial Number Command: 00 03

Get Security Level: 15

Change to KB/HID

KB: 01 10 01

HID: 01 10 00

MSR Enable Track SET Commands (Same property ID for KB and HID):

All tracks (default) 01 05 95

Track 1 only: 01 05 01

Track 2 only: 01 05 04

Track 1 & 2:01 05 05

Remove all Sentinels:

01 14 03

To remove individual Start/Stop Sentinels:

To remove the Start Sentinel from Track 1, send 01 24 00, then wait 15 seconds and send 02 to reset the MSR.

To remove the Start Sentinel from Track 2: 01 25 00, then wait 15 seconds and send 02.

To remove the End Sentinel from all tracks: 01 2B 00, then wait 15 seconds and send 02.

CR after each track (default is CR after all Data):

01 21 8D

Remove CR:

01 22 00

Polling Speed (default is 1 millisecond):

10 Milliseconds 01 02 0A



Reset the MSR to factory defaults:

Dynamag Defaults Level 2 KB.txt

Non-Encrypted MSR (KB/HID)

Get Serial Number Command:

00 01

Change to KB/HID

KB: 01 10 01

HID: 01 10 00

MSR Enable Track SET Commands

HID MSR Enable Track SET Commands:

- Track 1 Data only = 01 04 01
- Track 2 Data only = 01 04 04
- Track 1 & 2 only = 01 04 05
- Track 1, 2, & 3 = 01 04 95

KB MSR Enable Track SET Commands:

- Track 1 Data only = 01 03 01
- Track 2 Data only = 01 03 04
- Track 1 & 2 only = 01 03 05
- Track 1, 2, & 3 = 01 03 95

Remove all Sentinels:

01 04 00



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To remove individual Start/Stop Sentinels (KB Mode only):

Remove Track 1 Start Sentinel (Default "%"): 01 14 00

Remove Track 2 Start Sentinel (Default ";"): 01 15 00

Remove End Sentinel (Default "?"):

01 16 00

CR after each track (default is CR after all Data):

01 05 8D

Remove CR:

 $01\,05\,00$

Reset the MSR to factory defaults:

FC 55 AA

To save changes to MSR:

After sending any of the above programming commands, you need to wait 10 seconds, and send 02 to reset the MSR.