

Executive Summary

MagTek MSR JPOS driver for customers with a JPOS platform.

Tools Needed

- Windows 7 or above computer
- MagTek MSR in HID Mode with PID 002 or 011 (PID 002 or 011 are defaults PID's for HID Mode).

Use MagTek USB MSR application to change to HID if needed, and to verify PID's.

https://elotouch.sharepoint.com/:u:/s/KnoxvilleTechnicalServices/EXhO21kMxAZLiy0afCECxvoBak9U3_ 4GcSnPdrUdpfV1Tg?e=SdFkJ0

• MagTek JPOS Driver Package for USB HID Swipe Readers

Installation

- 1. Download the JPOS Driver Package for USB HID Swipe Reader: <u>https://elotouch.sharepoint.com/:u:/s/KnoxvilleTechnicalServices/EYAxPGCj0mlAoCNpZ-V1oYwB5mKGodUO4aQy_oLw2Q4KXA?e=Yaf64B</u>
- 2. Double click on the file to launch the installation and click Next.
 - a. Continue with installation per screen shots below:





- b. The default target folder:
 - For x86 platforms: C:\Program Files\OPOS\MagTek
 - For x64 platforms: C:\Program Files (x86)\OPOS\MagTek

Setup		×
Choose Destination Location Select folder where setup will in:) stall files.	
	Setup will install MagTek JavaPOS MSR v1.13 in the following folder. To install to this folder, click Next. To install to a different folder, click Browse and select another	
	Destination Folder C:\Program Files\JavaPOS\MagTek B <u>rowse</u>	
InstallShield	K Back Next> Cancel	

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c. The setup type for the installation of the MagTek OPOS MSR is 'Complete' or 'Custom'. The 'Complete' setup type will proceed to install all components for the MagTek OPOS MSR.



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d. If prompted, click on Yes to install Microsoft Visual C++ Runtime Libraries.

Microsoft Visual C++ 2005 Redistributabl –	×	
Please read the following license agreement. Press the PAGE DOWN to see the rest of the agreement.	key	
MICROSOFT SOFTWARE LICENSE TERMS	^	
MICROSOFT VISUAL C++ 2005 RUNTIME LIBRARIES These license terms are an agreement between Microsoft Corporation		
(or based on where you live, one of its affiliates) and you. Please		
read them. They apply to the software named above, which includes		
any Microsoft		
updates,		
supplements, Internet-based services, and		
* support services		
for this software, unless other terms accompany those items. If so,		
By using the software, you accept these terms. If you do not accept	~	
Do you accept all of the terms of the preceding License Acreement? If you		
choose No, Install will close. To install you must accept this agreement.		
Yes <u>N</u> o		
	_	

e. Click Finish to complete the installation.





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f. Click on driver again for modifications, repair, or removal of OPOS driver:



g. Continue to next page for testing OPOS installation.



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Testing OPOS Installation

The MagTek UPOS 1.13 JavaPOS MSR Utility application performs JavaPOS Check Health testing of the MagTek MSR JavaPOS device based on the pre-registered Logical Device Names (LDN) via the jpos.xml file.

Within the MagTek JavaPOS MSR target installation 'service' sub-folder, double click on the 'MSRUtility.bat' file to launch the MagTek JavaPOS MSR Utility Check Health application: C:\Program Files (x86)\JavaPOS\MagTek\service

Below is the MagTek JavaPOS MSR Utility Check Health application screen. The MSR Logical Device Name (LDN) within the combo box is to first be selected for the USB connected MagTek MSR device and tested by populating the fields below of the most recent swiped card data. The Clear button will clear all display data fields.

The pre-registered MagTek MSR Logical Device Names via the jpos.xml registration files are the

1) MagTekMSR (MagTek non-encrypted MSR reader)

MagTek JavaPOS MSR Check Health Application v1.13			
MSR Logical Device Name			
Track 1 Data			
Track 2 Data			
Track 3 Data			
Additional Security Information Track 1 Data Encrypted			
Track 2 Data Encrypted			
Track 3 Data Encrypted			
Clear			

2) MagTekMSR_Encrypted (MagTek encrypted MSR reader).



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The MagTek MSR Logical Device Names are displayed within the combo box:

1) 'MagTekMSR' (representing the non-encrypted based reader)

2) 'MagTekMSR_Encrypted' (representing the encrypted based reader) To be tested via the populated fields:

Track 1 Data, Track 2 Data and Track 3 Data for both the MagTek Non-encrypted and encrypted MSR reader; and the Additional Security Information, Track 1 Data Encrypted, Track 2 Data Encrypted and Track 3 Data Encrypted for the MagTek encrypted MSR reader.

🕌 MagTek JavaPOS MSR Check Health Application v1.13				
MSR Logical Device Name MagTekMSR MagTekMSR_Encrypted Track 2 Data				
Track 3 Data				
Additional Security Information Track 1 Data Encrypted				
Track 2 Data Encrypted				
Track 3 Data Encrypted				
Clear				

Example of using the 'MagTekMSR' Logical Device Name with the USB connected MagTek nonencrypted based reader.

The appropriate non-encrypted data fields are populated with clear text information.

📓 MagTek JavaPOS MSR Check Health Application v1.13				
MagTekMSR MSR Logical Device Name				
Track 1 Data				
B4322507007623214^SMITH/JOHN ^1004101000011103023419751000000				
Track 2 Data				
4322507007623214=100410111041975102031				
Track 3 Data				
Additional Security Information				
Track 1 Data Encrypted				
Track 2 Data Encrypted				
Track 3 Data Encrypted				
Clear				
MSR Device MagTekMSR idle, ready to swipe card				

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Example of using the 'MagTekMSR_Encrypted' Logical Device Name with the USB connected MagTek encrypted based reader.

The appropriate encrypted data fields are populated with masked text data and encrypted data along with the Additional Security Information for encrypted data decoding.

📓 MagTek JavaPOS MSR Check Health Application v1.13			
MagTekMSR_Encrypted MSR Logical Device Name			
Track 1 Data			
B423300000003214^SMITH/JOHN ^10040000000000000000000000000000000000			
Track 2 Data			
423300000003214=100400000000000000000000000000000000			
Track 3 Data			
9010010B04BCCB000733 Additional Security Information			
1482CR021C9DC7E51B06E1CBCB762CE68581D4EB02E327D7E5E713E7B3B5EB8C1286E80C9d			
Treach 2 Date Encounted			
4087D061079A0C6A5C21B6A9E05EE85E01127AE2186CFBA8C9C0CD1F485A81317ABAFB205B7			
Track 3 Data Encrypted			
Clear			
MSR Device MagTekMSR_Encrypted idle, ready to swipe card			



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MagTek Sample Application

The MagTek UPOS 1.13 JavaPOS MSR Sample application demonstrates the UPOS 1.13 JavaPOS MSR Properties, Methods and Events for the MagTek JavaPOS 1.13 MSR non-encrypted and encrypted readers.

Within the MagTek JavaPOS MSR target installation 'service' sub-folder, double click on the 'Sample' folder and then double click on the 'MSRSample.bat' file to launch the MagTek JavaPOS MSR Sample application: C:\Program Files (x86)\JavaPOS\MagTek\service\Sample

🕌 MagTek JavaPOS MSR Sample Application v1.13		
MagTekMSR MSR Logical Device Name		
Open Claim EnableDevice DataEventEnable	CheckHealth ClearInput	ClearInputProperties
Close Release FreezeEvents AutoDisable	Statistics DirectIO	Properties
		DecodeData ParseDecodeData TransmitSentinels TracksToRead TR_1_2_3 DataEncryptionAlgorithm 3DEA_DUKPT RetrieveCardProperty AccountNumber ErrorReportingType
Clear		CARD

The MagTek JavaPOS MSR Sample application screen. The MSR Logical Device Name (LDN) within the combo box is to first be selected for the USB connected MagTek MSR device for JavaPOS Properties, Methods and Events operations.



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Parameter Descriptions

MSR Logical Device Name

[Combo box]

This combo box contains the JavaPOS registered Logical Device Names (LDN) to be selected the for MagTek JavaPOS MSR device instantiation via the jpos.xml file located within target installation 'service' sub-folder.

JavaPOS Open method

[Button]

This button will pass the selected LDN as the string parameter of the JavaPOS Open method, which will instantiate the associated JavaPOS device object for processing of all JavaPOS MSR Properties, Methods and Events.

JavaPOS Claim method

[Button]

This button will claim the MagTek JavaPOS MSR device object for exclusive use. (Required for the JavaPOS MSR device object).

JavaPOS DeviceEnabled property

[Check box] This check box enables (checked) or disables (unchecked) the MSR device object. (Required for most JavaPOS operations).

JavaPOS DataEventEnabled property

[Check box]

This check box enables (checked) or disables (unchecked) Data Events to be sent from the MagTek JavaPOS MSR Service Object for any queued MSR read data. Per the UPOS 1.13 JavaPOS Standards specification, this DataEventEnabled property is set to false within the MagTek JavaPOS MSR Service Object after each JavaPOS MSR Data Event is fired to the JavaPOS application. The JavaPOS application is required to re-enable the DataEventEnabled property to receive the MSR read data from the most recent or queued card swipe.

JavaPOS CheckHealth method

[Button]

This button will invoke the CheckHealth (Internal) method and display the CheckHealthText Property value within the output window.

JavaPOS ClearInput method

[Button]

This button will clear any queued MSR read data within the MagTek JavaPOS MSR Service Object.



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JavaPOS ClearInputProperties method +

[Button] This button will clear all properties populated via the most recent MSR read data.

Properties

[Button]

This button will invoke and display all the JavaPOS common and device specific MSR properties within the output window. All properties associated to MSR read data will contain data from the most recently swiped card.

JavaPOS DecodeData property

[Check box]

This check box enables (checked) or disables (unchecked) the MSR specific DecodeData property.

JavaPOS ParseDecodeData property

[Check box]

This check box enables (checked) or disables (unchecked) the MSR specific ParseDecodeData property.

JavaPOS TransmitSentinels property

[Check box]

This check box enables (checked) or disables (unchecked) the MSR specific TransmitSentinels property.

TracksToRead

[Combo box]

This combo box contains the JavaPOS MSR options for the Tracks To Read setting and reflected within the populated JavaPOS MSR Properties.

DataEncryptionAlgorithm

[Combo box]

This combo box contains the MagTek JavaPOS MSR supported Data Encryption Algorithms. Note: This Property setting only applies to the MagTek encrypted based MSR devices.

RetrieveCardProperty

[Combo box]

This combo box contains the MSR specific Properties to be retrieved corresponding to the parsing of the recently swiped card.

Properties that do not contain data did not exist in the original track number data.



ErrorReportingType

[Combo box] This combo box contains the MSR specific Property for reporting the error type, either Card or Track based error reporting.

JavaPOS DirectIO method

[Button] This button invokes the DirectIO Method example.

JavaPOS Statistics method

[Button]

This button invokes the supported RetrieveStatistics Method returning the JavaPOS Statistics XML based string and is displayed within a launched dialog box.

JavaPOS AutoDisable property

[Check box]

This check box enables (checked) or disables (unchecked) the Auto Disable Property. This Property is used for added control with receiving event driven input from the MSR device object.

JavaPOS FreezeEvents property

[Check box]

This check box enables (checked) or disables (unchecked) the Freeze Events Property. This Property is used to control when events are to be received. This applies to all Events associated with the JavaPOS MSR device object.

JavaPOS Release (ReleaseDevice) method

[Button] This button will release the MagTek JavaPOS MSR device object from exclusive use.

JavaPOS Close method

[Button] This button will close the MagTek JavaPOS MSR device object instantiation.



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Examples

 Example one: Example of the Logical Device Name combo box containing the default JavaPOS MSR registered Logical Device Names (LDN) via the jpos.xml registration file. Additional Logical Device Names may be added or removed via the jposEntryEditor or manual editing of the jpos.xml file.

MagTek JavaPOS MSR Sample Application v1.13	
MagTekMSR MSR Logical Device Name	
MagTekMSR MagTekMSR_Encrypted EnableDevice DataEvent	Enable CheckHealth ClearInput ClearInputProperties
Close Release FreezeEvents AutoDisat	le Statistics DirectIO Properties
	DecodeData ParseDecodeData TransmitSentinels TracksToRead TR_1_2_3 DataEncryptionAlgorithm 3DEA_DUKPT RetrieveCardProperty AccountNumber ErrorReportingType
Clear	

2. **Example two:** Example of a received and displayed JavaPOS MSR Data Event of a swiped card. The 'MagTekMSR' Logical Device Name used as the JavaPOS MSR instantiated device object representing the MagTek non-encrypted MSR device.

MagTek JavaPOS MSR Sample Application v1.13	
MagTekMSR MSR Logical Device Name	
Open Claim Claim ChableDevice DataEventEnable CheckHealth ClearInput	ClearInputProperties
Close Release FreezeEvents AutoDisable Statistics DirectIO	Properties
DataEvent - (1) Time stamp: [2012/02/22 13:11:02] Track1Data = B4233607007623201^SMITH/JOHN ^10041010000111023210410651000000 Track1Length = 62 Track2Data = 4233807007623201=10041011104165103031 Track2Length = 37 Track3Data = Track3Langth = 0 Track4Data = Track4Data = Track4Length = 0	 ✓ DecodeData ✓ ParseDecodeData ✓ TransmitSentinels TracksToRead TR_1_2_3 ✓ DataEncryptionAlgorithm 3DEA_DUKPT ✓ RetrieveCardProperty AccountNumber ✓ ErrorReportingType CARD ✓
Clear	

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3. *Example three:* Example of clicking the Properties button displaying the JavaPOS MSR populated Properties of the most recently swiped card.

▲ MagTek JavaPOS MSR Sample Application v1.13	
MagTekMSR SI MSR Logical Device Name	
Open Claim Claim EnableDevice DataEventEnable CheckHealth ClearInput	t ClearInputProperties
Close Release FreezeEvents AutoDisable Statistics DirectIO	Properties
JavaPOS Properties - Time stamp: [2012/02/22 13:01:49]	📤 🗹 DecodeData
CapPowerReporting = JPOS_PR_NONE CapStatisticsReporting = True CapCompareFirmwareVersion = False CapUpdateFirmware = False CapUpdateStatistics = False CheckHealthText = MSR CheckHealth INTERNAL: Successful Claimed = True AutoDisable = False DataEventEnabled = False DataEventEnabled = False DeviceEnabled = True	 ✓ ParseDecodeData ☐ TransmitSentinels TracksToRead TR_1_2_3 ✓ DataEncryptionAlgorithm 3DEA_DUKPT ✓ RetrieveCardProperty AccountNumber
FreezeEvents = False	ErrorReportingType
PowerNotify = JPOS_PN_DISABLED PowerState = JPOS_PS_UNKNOWN State = JPOS_S_IDLE DeviceControlDescription = JavaPOS MSR Device Control	CARD
DeviceControlVersion = 1013000 DeviceControlVersion = MagTak MSD, Jacobos MSD Davice Service Conversit MagTak	
Clear	×