OPOS MSR Register

The **OPOS MSR Register** program is used to set up the registry information of MSRHK reader for OPOS program uses.

Installation

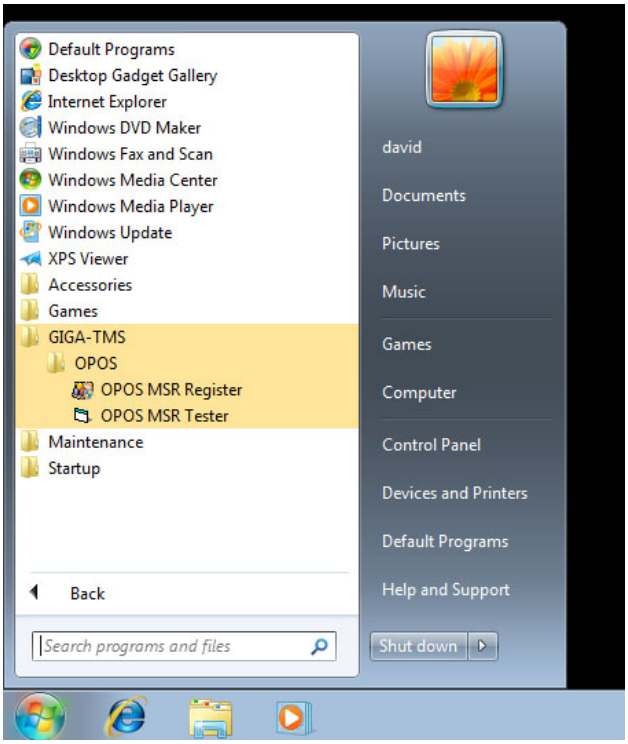
Below steps guide you how to install the **OPOS MSR Register** program.

- Insert the setup CD
- Run the **OPOSMSR_Setup.exe** setup file that is located in the Software folder of CD.
  * This setup also installs the OPOS MSR Tester program.
- Follow the wizard to complete the installation.

Launching Program

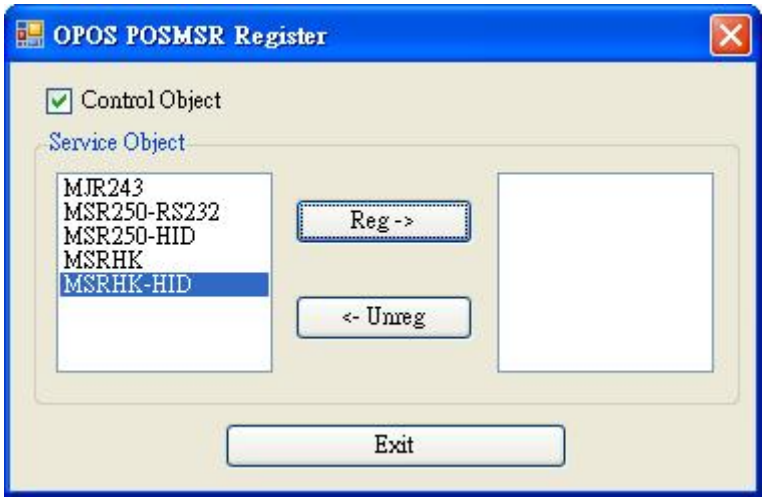
Below steps guide you how to load the **OPOS MSR Register** program.

- From **Start/Programs/GIGA-TMS**, click **OPOS** folder
- Click **OPOS MSR Register** to launch the program.



Configuration

Below is the main window of **OPOS MSR Register** program.



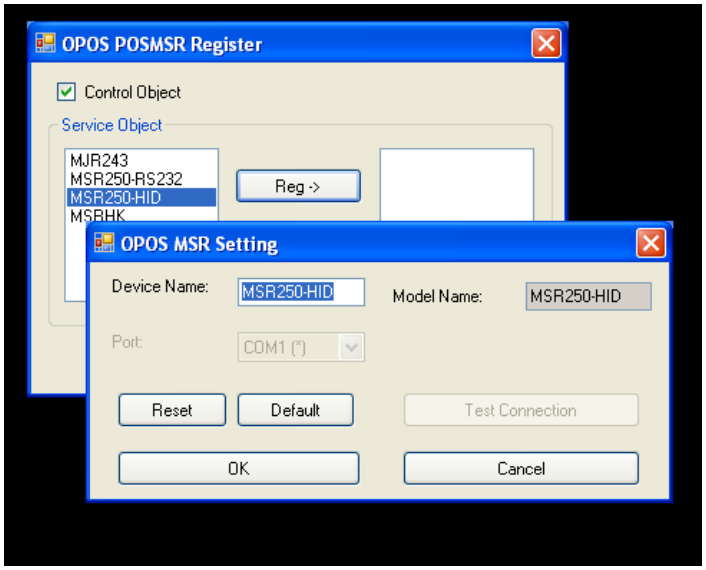
The main window has following components:

- **Control Object** check box: To register the OPOSMSR.ocx common control object driver. This needs to be checked to run the OPOS MSR Tester program.
- **Service Object** List box (left side): The Service Object driver types. So far only four types are supported. Each type support specific MSR readers. For more details, please refer to Types of Service Object for MSR Reader.
- **Service Object** List box (Right side): The registered MSR with specified device name.
- **Reg->** button**:** Create a new device name for selected MSR.
- **<-Unreg** button**:** Remove selected device name from registry.
- **Exit** button: End the program.

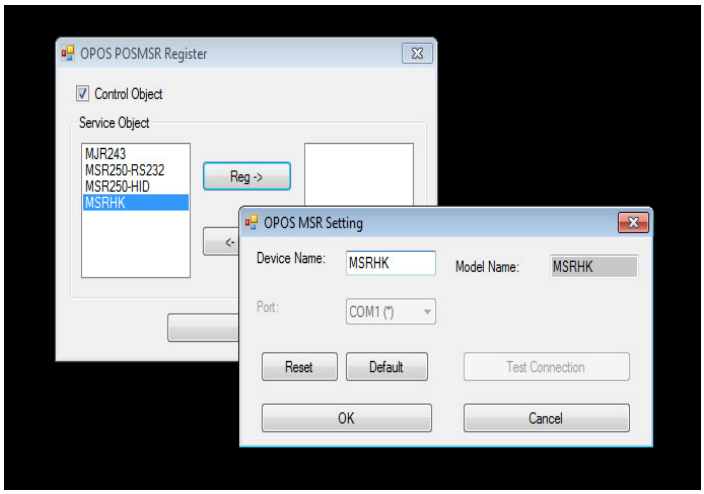
To register the MSRHK OPOS information, please do followings:

- Select an item in **Service Object** List box (left side), please refer to the table in Types of Service Object for MSR Reader to ensure the correct item is selected.
- Click **Reg->**
- In the **OPOS MSR Setting** Window, enter the *device name* and Click **OK**

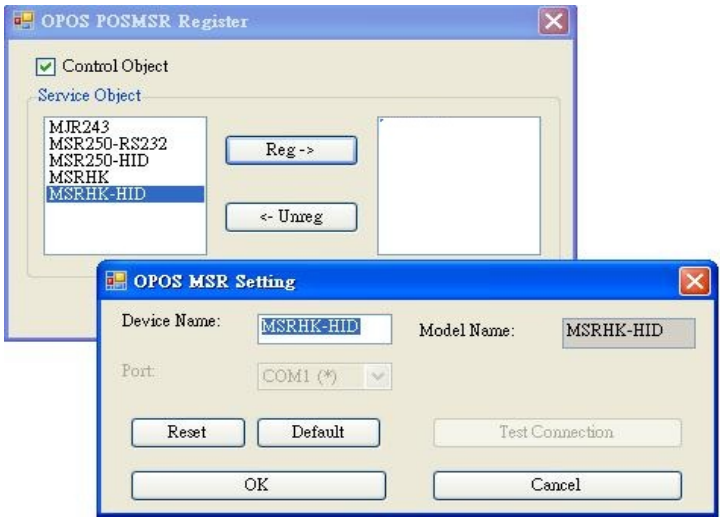
Example 1. MAGTEK USB HID



Example 2. PROMAG MSR/MJR PART-NO, Keyboard mode.



Example 3. PROGRAM MSR PART-NO, HID mode.



- If your system doesn't have other Common Control driver, then click **Control Object** check box.
  Note: If you want to run the OPOPS MSR Tester program, then the **Control Object** must be checked.

Types of Service Object for MSR Reader

Service Object type	MSR Reader
MSR250-RS232	MAGTEK Port-power swipe reader
MSR250-HID	MAGTEK USB HID swipe reader
MJR243	PROMAG MSR 170/220/250/350/400 L/R/U(VC) PROMAG MJR 243/350/400 L/R/U(VC)
MSRHK (Keyboard Mode、OPOS Flag is ON)	PROMAG MSR 170/220/250/350/400 K PROMAG MJR 243/350/400 K PROMAG MSR170/220/250/350/400 HK PROMAG MJR 243/350/400 HK
MSRHK-HID (HID Mode)	PROGRAM MSR 170/220/250HK

Registry Information

Below are the default registry settings for each Service Object type.

MSR250-RS232 type

	Key Name	Type	Default Value	Note
	CapISO	string	1	Capability for reading ISO track data
	CapJISOne	string	0	(reserved)
	CapJISTwo	string	0	(reserved)
	CapTransmitSentinels	string	1	Capability for reading Transmit Sentinels
	Debug	string	0	Enable the tracing, and create a log file
	Description	string	GIGATMS MSR POS	Description for SO driver
	DeviceName	string	MSR250-RS232	Devive Name for CO open
	FileName	string	(NULL)	(reserved)
	HardwareProvider	string	1	(reserved)
	Model	string	MSR250-RS232	Device model name
	Parity	string	None	Parity for the communication port
	Port	string	COM1	Comport Number
	Protocol	string	Hardware	Communication Control
	Baudrate	string	9600	RS232 baudrate

MSR250-HID type

	Key Name	Type	Default Value	Note
	CapISO	string	1	Capability for reading ISO track data
	CapJISOne	string	0	(reserved)
	CapJISTwo	string	0	(reserved)
	CapTransmitSentinels	string	1	Capability for reading Transmit Sentinels
	Debug	string	0	Enable the tracing, and create a log file
	Description	string	GIGATMS MSR POS	Description for SO driver
	DeviceName	string	MSR250-HID	Devive Name for CO open
	FileName	string	(NULL)	(reserved)
	HardwareProvider	string	1	(reserved)
	Model	string	MSR250-HID	Device model name
	Parity	string	None	Parity for the communication port
	Port	string	HID;VID=2049;PID=2	USB HID interface
	Protocol	string	Hardware	Communication Control

MJR243 type

	Key Name	Type	Default Value	Note
	CapISO	string	1	Capability for reading ISO track data
	CapJISOne	string	1	(reserved)
	CapJISTwo	string	1	(reserved)
	CapTransmitSentinels	string	1	Capability for reading Transmit Sentinels
	Debug	string	0	Enable the tracing, and create a log file
	Description	string	GIGATMS MSR POS	Description for SO driver
	DeviceName	string	MJR243	Devive Name for CO open
	FileName	string	(NULL)	(reserved)
	HardwareProvider	string	0	(reserved)
	Model	string	MJR243	Device model name
	Parity	string	None	Parity for the communication port
	Port	string	COM1	Comport Number
	Protocol	string	Hardware	Communication Control
	Baudrate	string	19200	RS232 baudrate

MSRHK type

	Key Name	Type	Default Value	Note
	CapISO	string	1	Capability for reading ISO track data
	CapJISOne	string	1	(reserved)
	CapJISTwo	string	1	(reserved)
	CapTransmitSentinels	string	1	Capability for reading Transmit Sentinels
	Debug	string	0	Enable the tracing, and create a log file
	Description	string	GIGATMS MSR POS	Description for SO driver
	DeviceName	string	MSRHK	Devive Name for CO open
	FileName	string	(NULL)	(reserved)
	HardwareProvider	string	0	(reserved)
	Model	string	MSRHK	Device model name
	Parity	string	NONE	Parity for the communication port
	Port	string	HOK	Hook driver
	Protocol	string	Hardware	Communication Control

MSRHK-HID type

	Key Name	Type	Default Value	Note
	CapISO	string	1	Capability for reading ISO track data

	CapJISOne	string	1	(reserved)
	CapJISTwo	string	1	(reserved)
	CapTransmitSentinels	string	1	Capability for reading Transmit Sentinels
	Debug	string	0	Enable the tracing, and create a log file
	Description	string	GIGATMS MSR POS	Description for SO driver
	DeviceName	string	MSRHK-HID	Devive Name for CO open
	FileName	string	(NULL)	(reserved)
	HardwareProvider	string	0	(reserved)
	Model	string	MSRHK-HID	Device model name
	Parity	string	NONE	Parity for the communication port
	Port	string	VID=5735;PID=26	UsbHid Interface
	Protocol	string	Hardware	Communication Control

OPOS APIs Supported List

Below are the OPOS supported APIs:

Type	Category	Type	Name	Mutability	OPOS APG Ver.	MSR.SO
Properties	common	bool	AutoDisable	R/W	1.2	Not Applicable
	common	long	BinaryConversion	R/W	1.2	Not Applicable
	common	bool	CapCompareFirmwareVersion	Read Only	1.9	Not Applicable
	common	long	CapPowerReporting	Read Only	1.3	Not Applicable
	common	bool	CapStatisticsReporting	Read Only	1.8	Not Applicable
	common	bool	CapUpdateFirmware	Read Only	1.9	Not Applicable
	common	bool	CapUpdateStatistics	Read Only	1.8	Not Applicable
	common	string	CheckHealthText	Read Only	1.0	Not Applicable
	common	bool	Claimed	Read Only	1.0	Supported
	common	long	DataCount	Read Only	1.2	Supported
	common	bool	DataEventEnabled	R/W	1.0	Supported
	common	bool	DeviceEnabled	R/W	1.0	Supported
	common	bool	FreezeEvents	R/W	1.0	Supported
	common	long	OpenResult	Read Only	1.5	Supported
	common	long	OutputID	Read Only	1.0	Not Applicable
	common	long	PowerNotify	R/W	1.3	Not Applicable
	common	long	PowerState	Read Only	1.3	Not Applicable
	common	long	ResultCode	Read Only	1.0	Supported
	common	long	ResultCodeExtended	Read Only	1.0	Supported
	common	long	State	Read Only	1.0	Supported
	common	string	ControlObjectDescription	Read Only	1.0	Supported
	common	long	ControlObjectVersion	Read Only	1.0	Supported
	common	string	ServiceObjectDescription	Read Only	1.0	Supported

	common	long	ServiceObjectVersion	Read Only	1.0	Supported
	common	string	DeviceDescription	Read Only	1.0	Supported
	common	string	DeviceName	Read Only	1.0	Supported
	Specific	bool	CapISO	Read Only	1.0	Supported
	Specific	bool	CapJISOne	Read Only	1.0	Not Applicable
	Specific	bool	CapJISTwo	Read Only	1.0	Not Applicable
	Specific	bool	CapTransmitSentinels	Read Only	1.5	Supported
	Specific	long	CapWriteTracks	Read Only	1.10	Not Applicable
	Specific	string	AccountNumber	Read Only	1.0	Supported
	Specific	bool	DecodeData	R/W	1.0	Supported
	Specific	long	EncodingMaxLength	Read Only	1.10	Not Applicable
	Specific	long	ErrorReportType	R/W	1.2	Not Applicable
	Specific	string	ExpirationDate	Read Only	1.0	Supported
	Specific	string	FirstName	Read Only	1.0	Supported
	Specific	string	MiddleInitial	Read Only	1.0	Supported
	Specific	bool	ParseDecodeData	R/W	1.0	Supported
	Specific	string	ServiceCode	Read Only	1.0	Supported
	Specific	string	Suffix	Read Only	1.0	Supported
	Specific	string	Surname	Read Only	1.0	Supported
	Specific	string	Title	Read Only	1.0	Supported
	Specific	binary	Track1Data	Read Only	1.0	Supported
	Specific	binary	Track1DiscretionaryData	Read Only	1.0	Supported
	Specific	binary	Track2Data	Read Only	1.0	Supported
	Specific	binary	Track2DiscretionaryData	Read Only	1.0	Supported
	Specific	binary	Track3Data	Read Only	1.0	Supported
	Specific	binary	Track4Data	Read Only	1.5	Not Applicable
	Specific	long	TracksToRead	R/W	1.0	Supported
	Specific	long	TracksToWrite	R/W	1.10	Not Applicable
	Specific	bool	TransmitSentinels	R/W	1.5	Supported
Methods	common		Open		1.0	Supported
	common		Close		1.0	Supported
	common		Claim		1.0	Supported
	common		ClaimDevice		1.5	Supported
	common		Release		1.0	Supported
	common		ReleaseDevice		1.5	Supported
	common		CheckHealth		1.0	Not Applicable
	common		ClearInput		1.0	Supported
	common		ClearInputProperties		1.10	Supported
	common		ClearOutput		1.0	Not Applicable
	common		DirectIO		1.0	Not Applicable
	common		CompareFirmwareVersion		1.9	Not Applicable
	common		ResetStatistics		1.8	Not Applicable

	common	RetrieveStatistics		1.8	Not Applicable
	common	UpdateFirmware		1.9	Not Applicable
	common	UpdateStatistics		1.8	Not Applicable
Events	common	DataEvent		1.0	Supported
	common	DirectIOEvent		1.0	Not Applicable
	common	ErrorEvent		1.0	Not Applicable
	common	OutputCompleteEvent		1.0	Not Applicable
	common	StatusUpdateEvent		1.0	Not Applicable

OPOS MSR Tester

The **OPOS MSR Tester** program is used to get the track data of MSRHK reader via the OPOS driver. Before running this program, make sure the device name registry information for MSRHK reader is already created by OPOS MSR Register program.

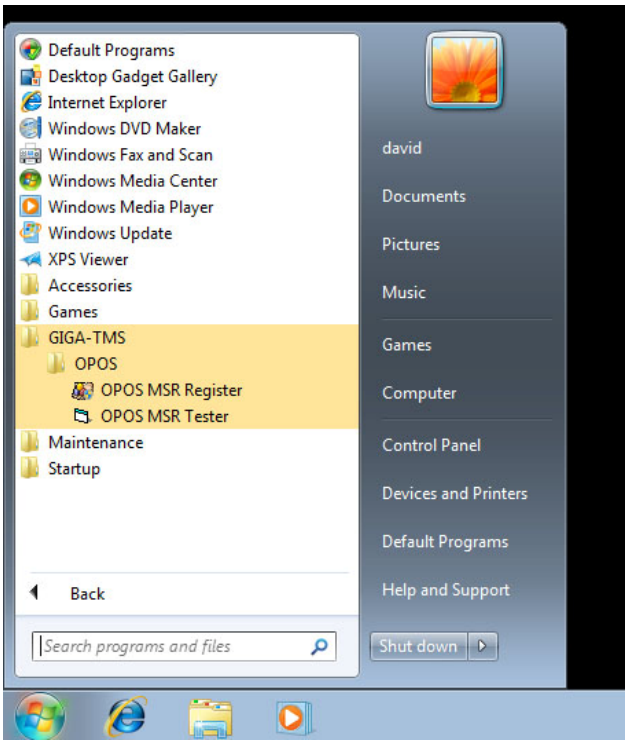
Installation

The installation of **OPOS MSR Tester** program is together with OPOS MSR Register program. Refer this for details.

Launching Program

Below steps guide you how to load the **OPOS MSR Tester** program.

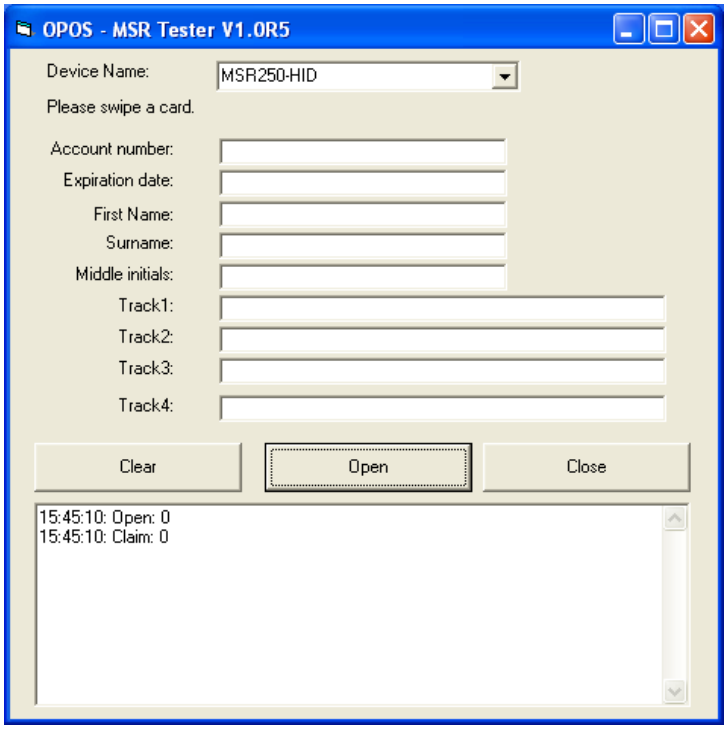
- From **Start**/**Programs/GIGA-TMS**, click **OPOS** folder
- Click **OPOS MSR Tester** to launch the program.



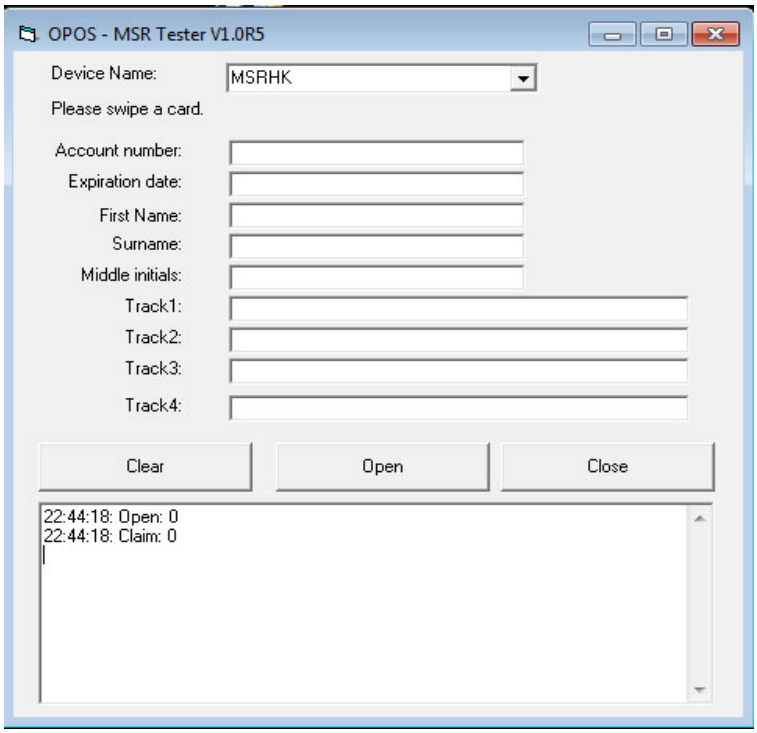
Configuration

Below is the main window of **OPOS MSR Tester** program.

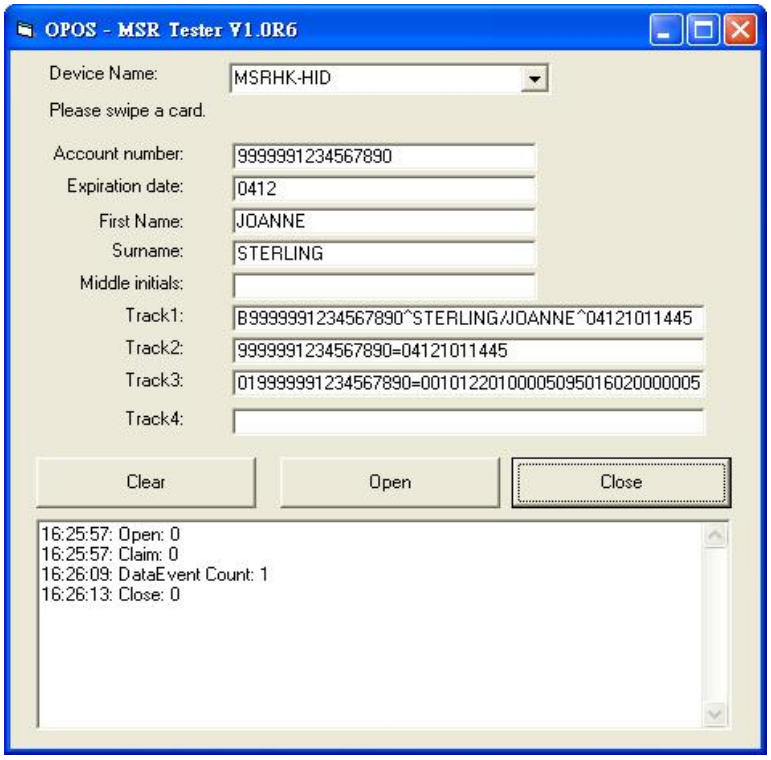
Example 1. MAGTEK USB HID.



Example 2. PROMAG MSR/MJR PART-NO, Keyboard mode.



Example 3. PROMAG MSR PART-NO, HID mode.



The main window has following components:

- **Device Name** combo box: Enter the device name that to be loaded to the program.
- **Track Data** Text boxes: Show the raw and parsed track data.
- **Clear** button: Clear all the track data in the text boxes.
- **Open** button: Open the OPOS driver and ready to get track data.
- **Close** button: Close the OPOS driver.
- **Message** text box: Display the result message of running the OPOS driver.

To start using OPOS driver to get track data, please do the following steps:

- Entering the **Device Name**.
- Clicking **Open** button.
- Swiping card to get track data.