



Value through Innovation

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**USER'S MANUAL
MSR OPOS
DEMO SOFTWARE**

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1. INTRODUCTION

This document describes execution and function of the MiniMag II OPOS for USB-HID-KB” test program. This program demonstrates the interface to a MSR OPOS driver. For additional information see ID TECH website at <http://www.id-tech.com>.

System Requirements

This program is designed to operate with Windows 98SE, Windows 2000 and Windows XP. The PC must have an available USB connection. The program is designed to work with the MiniMag II USB-HID-KB reader.

Reference Documents

1. Application Programmer’s Guide Release 1.6 July 15, 2001 International Standard Windows 95/98/ME, Windows NT, Windows 2000, or other OLE/ActiveX compliant 32-bit operating system
2. Control Programmer’s Guide Release 1.6 July 15, 2001 International Standard Windows 95/98/ME, Windows NT, Windows 2000, or other OLE/ActiveX compliant 32-bit operating system
3. Unified POS Retail Peripheral Architecture Version V1.8
4. MiniMag II User's Manual

Definitions

CO	Control Object
ISO	International Standards Organization

MSR	Magnetic Stripe Reader
OLE	Object Linking and Embedding
OPOS	OLE for Point Of Sale, driver decodes magnetic stripe data into logical fields
PC	Personal Computer
SO	Service Object

2. INSTALLATION

To install the test program, run the setup program. The setup program prompts for the directory in which you wish to install the program and initializes all of the required registry settings. The serial number is "ID TECH". This will need to be entered in order to run the program. In addition a program group will be created to contain the test program and an icon for this file.

File list

ID TECH MSR OPOS Test Program.exe	The application execute file
IDTMSRSOIL.dll	The Service Object driver file
KBHook.dll	The special file for keyboard interface
OPOSMSR.ocx	The active X Control Object file, version 1.9

3. TEST PROGRAM DETAILS

The KBHook.dll must be in the same directory with “ID TECH MSR OPOS Test Program.exe” or in the system32 directory, and the SO and CO files have been registered. This is done by the setup program. Also the MSR is an exclusive device, after being claimed, other applications can not access this device.

Please UPOS Specifications <http://www.nrf-arts.org/download/upos18.pdf> for detail information about properties, events and actions.

Following is a list of functions which can be tested by Test Program.

Open

Claim

Check Health

 Internal

 External

 Interactive

Clear Input

Direct IO

Clear Release

Close

Description

Control

 Claimed

 Auto Disable

 Device Enabled

 Freeze Events

 DataEvent Enabled

 PowerNotify

Track Control

 ParseDecodeDate

 TransmitSentinels

 TracksToRead

 ErrorReportingType

Track Data

 Track1Data

 Track1DiscretionaryData

 Track2Data

 Track2DiscretionaryData

 Track3Data

 Track4Data

Parsed Data

AccountNumber
ExpirationDate
FirstName
MiddleInitial
Surname
Title
Suffix
ServiceCode

Clear Report
Save Report
Default Test
Exit

Functions not Supported

PowerNotify
DirectIO
DecodeData

In this MSR OPOS Driver Release version

CapPowerReporting
PowerNotify
PowerState
CapJISOne
CapJISTwo
Track4Data
DirectIO

StatusUpdateEvent is not supported, and DecodeData is always true.

Error Processing

When swiping cards, if the track data is not ISO format, the MSR OPOS driver sends an error event to the CO, the test program then will generate an error response dialog and the will show ERROR. This version of the MSR OPOS SO driver only can parse a credit card, if the card is not a ISO card it also sends Error Event. When selecting the error reporting type ***MSR_ERT_CARD***, it will show “Unknown Error,” when selecting the error reporting type ***MSR_ERT_TRACK***, it will show 3 tracks error is “Unknown Error”. About the error response, when selecting “Retry” or “Continue Input”, the wrong track data will continue to display, if one selects “Clear,” the incorrect track data is discard. After processing, the state will be IDLE.

4. MSR OPOS SO DRIVER

In VB or VC, import the OPOSMSR.ocx into the project, and you will see all the methods and properties you can access. To access MiniMag II, call "Open" method with the device name "IDTechMiniMagII".

The following code extracted from a VC application is an illustration that shows how to access the MiniMag II:

```
//Here m_Msr represent the MiniMag II control object.
m_Msr.Open("IDTechMiniMagII");

//Check whether the device is succeed to open, or not
if( m_Msr.GetResultCode() != OPOS_SUCCESS )
    MessageBox("This device has not been registered, or cannot be used.");

//Get the exclusive control right for the opened device.
//Then the device is disabled for other application.
//(Notice: When using an old CO, use the Claim.)
m_Msr.ClaimDevice( 1000 );

if( m_Msr.GetResultCode() != OPOS_SUCCESS )
    MessageBox("Fails to get the exclusive right for the device.");

//Enable the device.
m_Msr.SetDeviceEnabled( TRUE );
m_Msr.SetDataEventEnabled( TRUE );
m_Msr.SetParseDecodeData( TRUE );
```

NOTE: When don't want to access the MiniMag II or before exiting the application, call the codes as follows:

```
//Cancel the device
m_Msr.SetDeviceEnabled( FALSE );

//Release the device exclusive control right.
//(Notice:When using an old CO, pls use the function Release().)
m_Msr.ReleaseDevice();

//Finish using the device.
m_Msr.Close();
```