

# 1. ActiveX Object

## 1.1. Reader Methods

Method	Parameters	Description	Response
Open	Device name (string)  Device name is specified as a string starting with the characters 'GIS HID#' followed by a specification of the vendor and product identifiers, for example, 'GIS HID#vid_0f1a&pid_0500'	Open specified device if attached	Success or failure
Close	None	Close open device	None
ReaderVersion	None	Read the software version from the device	"MPR V1.1.1"
GetReaderList	None	Returns a semi-colon separated list of the USB readers currently plugged into the PC.	"GIS HID:1#vid_0f1a&pid_0500; GIS HID:2#vid_0f1a&pid_0500; GIS HID:1#vid_0f1a&pid_0501"
Enable	None	Enable reader for card access	Success or failure
Disable	None	Disable card access	None

## 1.2. Mifare Card Methods

Method	Parameters	Description	Response
Find	None	Scan for cards and return a comma separated list of cards card serial numbers found	“01 4D 44 0C, 8F 2A 42 6A ”
Select	Serial number of card required. For example: “01 4D 44 0C “	Select the specified card	Success or failure
UnlockBlock	Block number (0 thru 63) and key. Key is specified as a hex-string with the first byte-pair being 00 for Key-A and 01 for Key-B, and the six bytes following specify the key value. For example: “00 A0 A1 A2 A3 A4 A5”	Unlock the specified block using the supplied key	Success or failure
ReadBlock	Block number (0 thru 63).	Read the specified block and return a hex-string consisting of 16 pairs of hex digits.	“00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F ”
WriteBlock	Block number (0 thru 63) and the contents of the block to write specified as a hex-string with 16 pairs of hex digits.	Write the specified contents to the requested block.	Success or failure
ReadFull	Number of sectors to read (1 thru 40) and sector keys in same format as UnlockBlock. For example: "10 00 A0 A1 A2 A3 A4 A5 01 B0 B1 B2 B3 B4 B5”	Reads complete card contents, unlocking sector trying each of the keys specified in turn	Hex data of card contents

### **1.3. Miscellaneous Methods**

<b>Method</b>	<b>Parameters</b>	<b>Description</b>	<b>Response</b>
Beep	Duration in milli-seconds (1/1000 <sup>th</sup> of a second)	Produce a tone for the specified period.	None
Sleep	Duration in milli-seconds (1/1000 <sup>th</sup> of a second)	Delay of the specified period.	None
GetLastError	None	Return a text string describing the last error.	“ERROR: 0x00005533”

## 2. Example

### 2.1. JavaScript

```
DisplayText("HID Reader");
debug = 1;

card = new ActiveXObject("gismpcr.Reader");

DisplayText("Test begins...");

TestCard("GIS HID#vid_0fla&pid_0500");

function TestCard(device)
{
    try
    {
        DisplayText("Readers: " + card.GetReaderList());
    }
    catch (e)
    {
    }

    try
    {
        card.Open(device);
        DisplayText("Device: " + device);
    }
    catch (e)
    {
        DisplayText("Open Error: " + card.GetLastError());
        return;
    }

    try
    {
        DisplayText("Version: " + card.ReaderVersion());

        card.Enable();
        DisplayText("Mifare ON");

        sn = card.Find();
        DisplayText("Found Cards: " + sn);

        sn = sn.substr(0, 11);
        card.Select(sn);
        DisplayText("Select Card: " + sn);

        card.Beep(250);
    }
    catch (e)
    {
        error = card.GetLastError();
        DisplayText("Select Error: " + error);
        card.Disable();
    }

    try
    {
        try
        {
            card.UnlockBlock(0, "00 A0 A1 A2 A3 A4 A5 ");
            DisplayText("Unlocked");
        }
        catch (e)
        {
            card.UnlockBlock(0, "00 FF FF FF FF FF FF ");
            DisplayText("Unlocked");
        }

        resp = card.ReadBlock(0);
        DisplayText("Data0: " + resp);
    }
}
```

```
        resp = card.ReadBlock(1);
        DisplayText("Data1: " + resp);

        resp = card.ReadBlock(2);
        DisplayText("Data2: " + resp);

        resp = card.ReadBlock(3);
        DisplayText("Data3: " + resp);

        card.Beep(250);

        card.Disable();
        DisplayText("Mifare OFF");
    }
    catch (e)
    {
        error = card.GetLastError();
        DisplayText("Error: " + error);
        card.Disable();
    }

    card.Close();
}

DisplayText("...Test ends");

function DisplayText(txt)
{
    try {
        WScript.Echo(txt);
    } catch (e) {
        try {
            document.writeln(txt);
        } catch (e) {
        }
    }
}
```