



# **J2 iButton to MSR Emulator**

**Software Manual**

---

**December 2013**

Copyright © 2013 J2 Retail Systems Ltd  
All other trademarks are the property of their respective owners.  
All rights reserved.

## **Change history**

Version 1.0 Released December 16, 2013

## ***Contents***

<b>Overview .....</b>	<b>4</b>
<b>Software Design.....</b>	<b>4</b>
<b>Installation.....</b>	<b>4</b>
<b>J2 iButton to MSR Emulator .....</b>	<b>5</b>
<b>Contact Information .....</b>	<b>7</b>

## Overview

The J2 iButton to MSR Emulator software was written to allow the use of the J2 iButton reader for employee login without modify the POS application software that was written for a MSR card login in.

The software when installed causes any reads of an iButton to be output to the keyboard port in a format compatible with the data output from a MSR card.

## Software Design

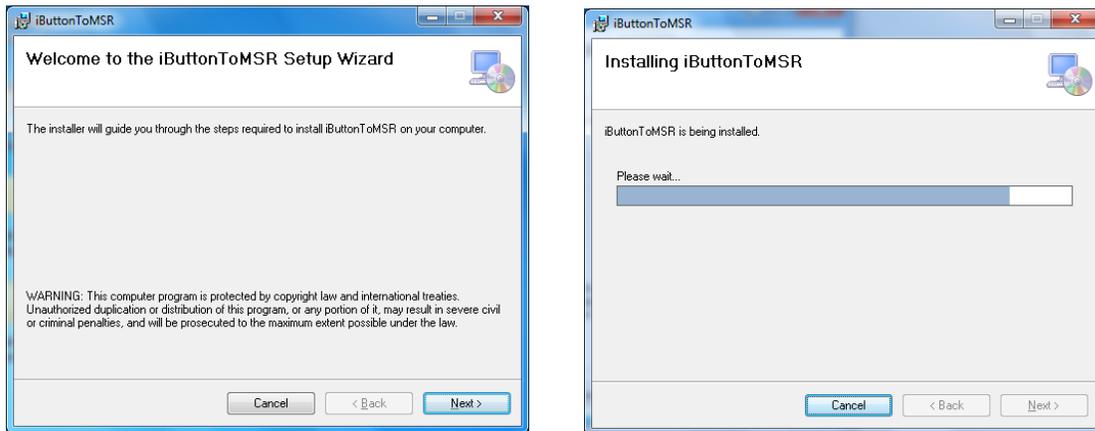
The software monitors the keyboard port and looks constantly for the unique header output by the J2 iButton reader. When detected the software reads the iButton and converts the output to a 9 digit ASCII numeric number with the correct postamble and preamble to emulate a MSR card.

## Installation

To install the J2 iButton to MSR Emulator software please download the setup software from the J2 Support web site. The source code can also be downloaded from the web site.

The web sites address is: <http://support.j2rs.com/>

Once the software has been downloaded, run Setup to install the J2 iButton to MSR Emulator software.



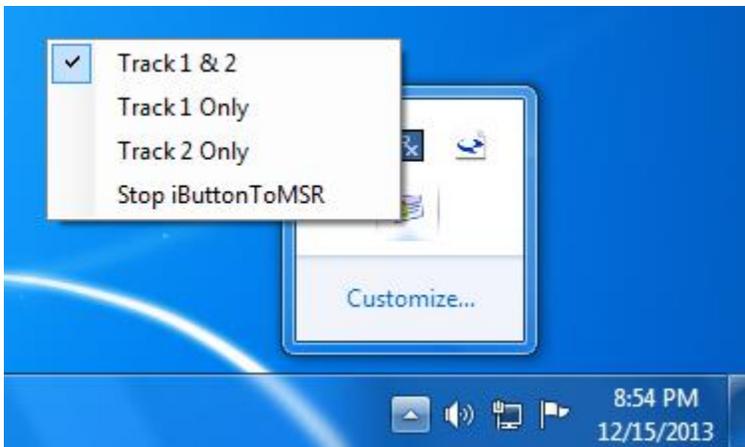
After the software is installed close the software with the Finish button and reboot the system.

## J2 iButton to MSR Emulator

Once the software is installed and the system is rebooted the emulation software will be running. An icon with show in the notification tray when the software is running, as shown below.

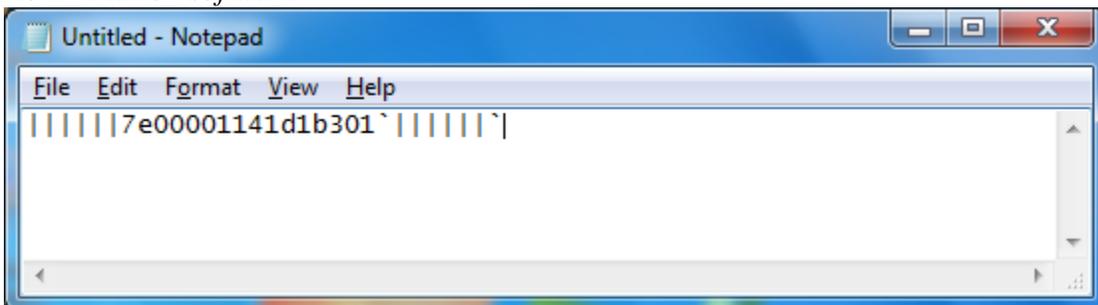


By right clicking of the icon a few options are available. They allow for the iButton to output the serial number data as track 1&2 MSR data, track 1 data or track 2 data. There is also an option to stop the emulator for trouble shooting purposes. The Track selection will be stored in the system registry and retain after a reboot.

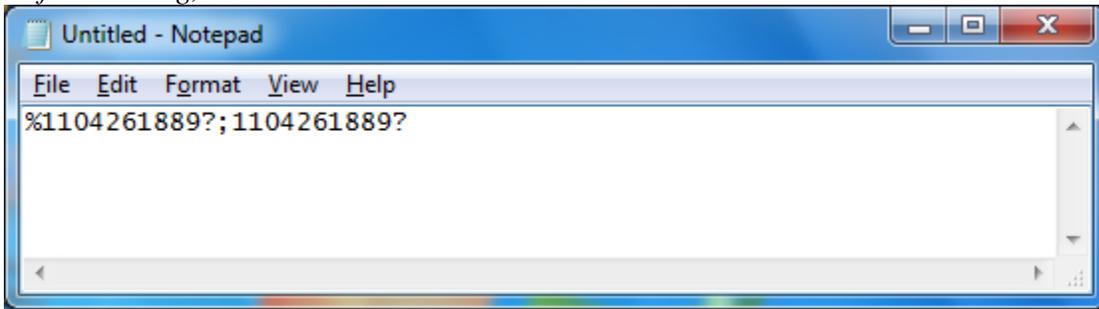


Notepad can be used to test the emulator software. Below are the possible outputs.

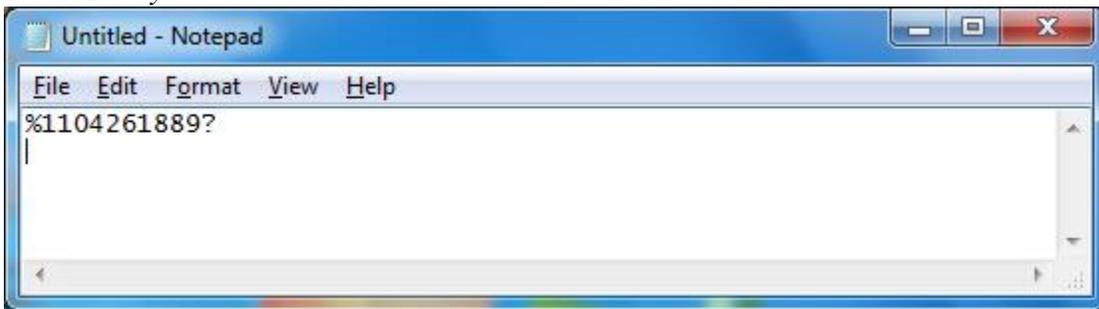
*No Emulation software*



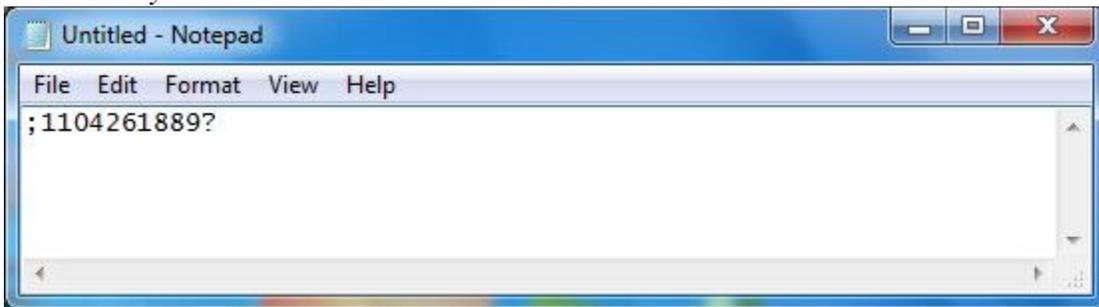
*Default setting, Track 1&2*



*Track 1 only*



*Track 2 only*



The serial number of the iButton is converted to a 9 digital decimal number. The upper bits of the serial number are stripped off.

If the POS software cannot handle a 9 digit number please contact J2 and a custom version of the emulator software can be made available to fit your needs.

## **Contact Information**

### **European Office**

J2 Retail Systems Ltd.  
J2 House  
Clayton Road, Birchwood  
Warrington WA3 6RP  
United Kingdom

44 (0) 1925 817003 Phone  
44 (0) 1925 811989 Fax

### **USA Office**

J2 Retail Systems Inc.  
9251 Irvine Boulevard  
Irvine  
CA 92618  
USA

(714) 669-3111 Phone  
(714) 669-3133 Fax

### **Australian Office**

J2 Retail Systems Pty Ltd  
Unit 6 83/85 Boundary Road  
Mortdale NSW 2223  
Australia

02 9584 5222 Phone  
02 9584 1500 Fax

### **Web site**

<http://www.j2retailsystems.com>