

# MagTek Universal SDK

For MMS Devices

Demo Manual (Windows)

June 2021

Manual Part Number: D998200395-20

**REGISTERED TO ISO 9001:2015** 

# Copyright © 2006 - 2021 MagTek, Inc. Printed in the United States of America

Information in this publication is subject to change without notice and may contain technical inaccuracies or graphical discrepancies. Changes or improvements made to this product will be updated in the next publication release. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of MagTek, Inc.

MagTek® is a registered trademark of MagTek, Inc.

MagneSafe® is a registered trademark of MagTek, Inc.

iDynamo™, and uDynamo are trademarks of MagTek, Inc.

eDynamo™, Dynamag, and DynaMAX are trademarks of MagTek, Inc.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by MagTek is under license.

Microsoft®, Windows® and .NET® are registered trademarks of Microsoft Corporation.

EMV® is a registered trademark in the U.S. and other countries and an unregistered trademark elsewhere. The EMV trademark is owned by EMVCo, LLC. The Contactless Indicator mark, consisting of four graduating arcs, is a trademark owned by and used with permission of EMVCo, LLC.

All other system names and product names are the property of their respective owners.

Table 0.1 - Revisions

Rev Number	Date	Notes
10	October 1, 2020	Initial release
11	October 22, 2020	Added features Show Image and Send File to the Configuration tab.
12	January 25, 2021	Added features to support signature capture and host driven fallback.
20	June 17, 2021	Updated GUI to support manual card entry and event notifications.

#### SOFTWARE LICENSE AGREEMENT

IMPORTANT: YOU SHOULD CAREFULLY READ ALL THE TERMS, CONDITIONS AND RESTRICTIONS OF THIS LICENSE AGREEMENT BEFORE INSTALLING THE SOFTWARE PACKAGE. YOUR INSTALLATION OF THE SOFTWARE PACKAGE PRESUMES YOUR ACCEPTANCE OF THE TERMS, CONDITIONS, AND RESTRICTIONS CONTAINED IN THIS AGREEMENT. IF YOU DO NOT AGREE WITH THESE TERMS, CONDITIONS, AND RESTRICTIONS, PROMPTLY RETURN THE SOFTWARE PACKAGE AND ASSOCIATED DOCUMENTATION TO THE ADDRESS ON THE FRONT PAGE OF THIS DOCUMENT, ATTENTION: CUSTOMER SUPPORT.

#### TERMS, CONDITIONS, AND RESTRICTIONS

MagTek, Incorporated (the "Licensor") owns and has the right to distribute the described software and documentation, collectively referred to as the "Software."

**LICENSE:** Licensor grants you (the "Licensee") the right to use the Software in conjunction with MagTek products. LICENSEE MAY NOT COPY, MODIFY, OR TRANSFER THE SOFTWARE IN WHOLE OR IN PART EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT. Licensee may not decompile, disassemble, or in any other manner attempt to reverse engineer the Software. Licensee shall not tamper with, bypass, or alter any security features of the software or attempt to do so.

**TRANSFER:** Licensee may not transfer the Software or license to the Software to another party without the prior written authorization of the Licensor. If Licensee transfers the Software without authorization, all rights granted under this Agreement are automatically terminated.

**COPYRIGHT:** The Software is copyrighted. Licensee may not copy the Software except for archival purposes or to load for execution purposes. All other copies of the Software are in violation of this Agreement.

**TERM:** This Agreement is in effect as long as Licensee continues the use of the Software. The Licensor also reserves the right to terminate this Agreement if Licensee fails to comply with any of the terms, conditions, or restrictions contained herein. Should Licensor terminate this Agreement due to Licensee's failure to comply, Licensee agrees to return the Software to Licensor. Receipt of returned Software by the Licensor shall mark the termination.

**LIMITED WARRANTY:** Licensor warrants to the Licensee that the disk(s) or other media on which the Software is recorded are free from defects in material or workmanship under normal use.

THE SOFTWARE IS PROVIDED AS IS. LICENSOR MAKES NO OTHER WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Because of the diversity of conditions and PC hardware under which the Software may be used, Licensor does not warrant that the Software will meet Licensee specifications or that the operation of the Software will be uninterrupted or free of errors.

IN NO EVENT WILL LICENSOR BE LIABLE FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE, OR INABILITY TO USE, THE SOFTWARE. Licensee's sole remedy in the event of a defect in material or workmanship is expressly limited to replacement of the Software disk(s) if applicable.

**GOVERNING LAW:** If any provision of this Agreement is found to be unlawful, void, or unenforceable, that provision shall be removed from consideration under this Agreement and will not affect the enforceability of any of the remaining provisions. This Agreement shall be governed by the laws of the State of California and shall inure to the benefit of MagTek, Incorporated, its successors or assigns.

ACKNOWLEDGMENT: LICENSEE ACKNOWLEDGES THAT HE HAS READ THIS AGREEMENT, UNDERSTANDS ALL OF ITS TERMS, CONDITIONS, AND RESTRICTIONS, AND AGREES TO BE BOUND BY THEM. LICENSEE ALSO AGREES THAT THIS AGREEMENT SUPERSEDES ANY AND ALL VERBAL AND WRITTEN COMMUNICATIONS BETWEEN LICENSOR AND LICENSEE OR THEIR ASSIGNS RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT.

QUESTIONS REGARDING THIS AGREEMENT SHOULD BE ADDRESSED IN WRITING TO MAGTEK, INCORPORATED, ATTENTION: CUSTOMER SUPPORT, AT THE ADDRESS LISTED IN THIS DOCUMENT, OR E-MAILED TO SUPPORT@MAGTEK.COM.

### 0 - Table of Contents

## **Table of Contents**

Table of	of Contents	5
1 Int	troduction	6
2 Ho	ow to Connect to MTUSDKNET Demo	7
2.1	Connect via USB Interface	7
3 Но	ow to use the MTUSDKNET Demo	8
	Send Command	
3.2	EMV Transaction	9
3.3	TLV Parser	10
3.4	Device Info	11
	Configuration	

#### 1 Introduction

This document provides instructions to use the MTUSDKNET Demo. It is part of a larger library of documents designed to assist Secure Card Readers implementers, which includes the following documents available from MagTek:

• D998200380 MAGTEK UNIVERSAL SDK PROGRAMMER'S MANUAL (MICROSOFT .NET)

#### 2 How to Connect to MTUSDKNET Demo

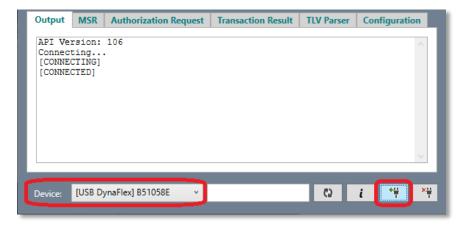
To connect via an interface follow these steps:

#### 2.1 Connect via USB Interface

- 1) Connect the device to the USB port of the Windows PC.
- 2) Launch the MTUSDKNET Demo and press the **Scan** button to display a list of available devices.



3) Select the device from the **Device** list box and press the **Connect** button to open the device.



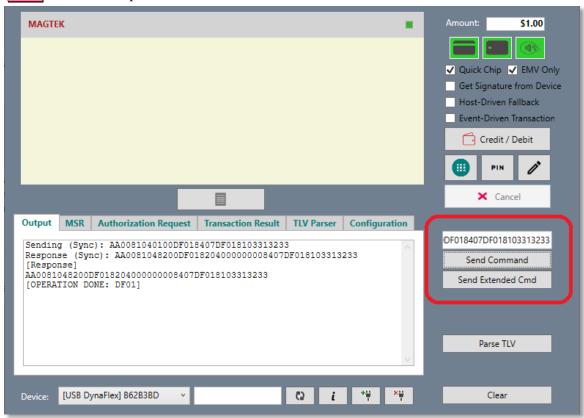
#### 3 How to use the MTUSDKNET Demo

The following instructions detail how to use the MTUSDKNET Demo on Windows PC via USB interface. Same instructions apply to the other interface types.

MTUSDKNET Demo queries for device features upon connecting. Some demo features are disabled based on what is supported on the device.

#### 3.1 Send Command

1) To send a command to the device, input custom command in the command text box and press the **Send** button. Example Echo: AA0081040100DF018407DF018103313233



#### 3.2 EMV Transaction

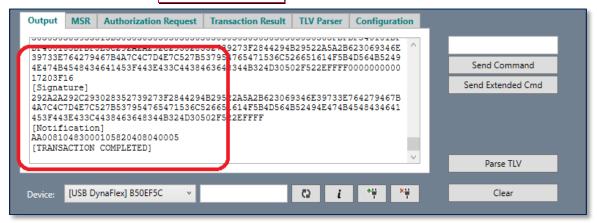
1) To perform an EMV transaction, select the desired card types and EMV options, then press the **Credit/Debit** button to start the transaction.



2) Follow any instructions on the device or demo software.



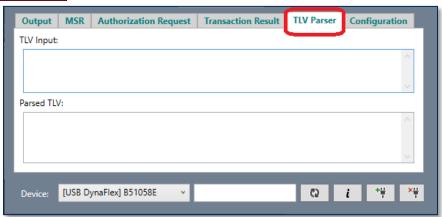
3) After the transaction, the status will be displayed in the **Output** tab, and you can also view more detail information in the **Transaction Result** tab.



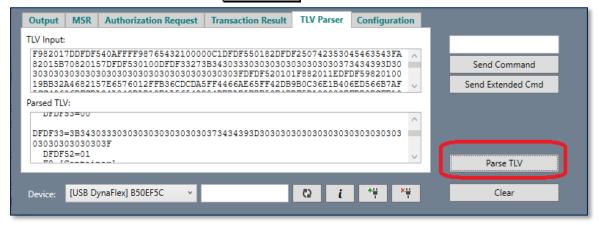
#### 3.3 TLV Parser

To parse custom TLV blob, follow these steps.

1) Press the **TLV Parser** tab.

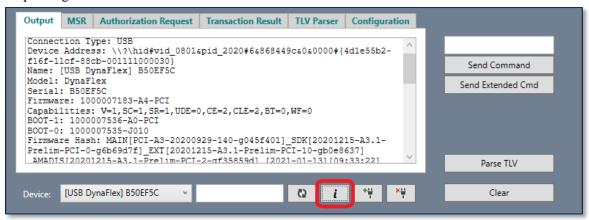


2) Copy and paste the TLV you want to parse to the **TLV Input** text box, then press the **Parse TVL** button. The result will show in the **Parsed TLV** text box.

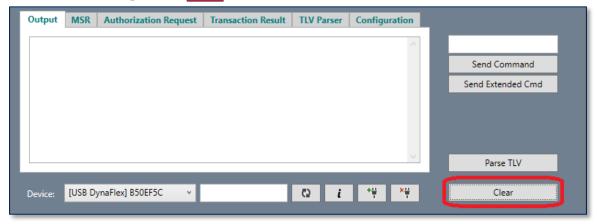


#### 3.4 Device Info

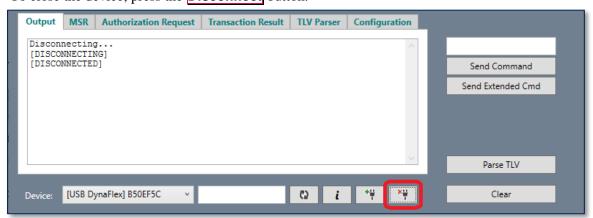
1) To view the device information, press the **Output** tab, then press **Get Info** button. An example of requesting device's information is shown below.



2) To clear the screen, press the **Clear** button.



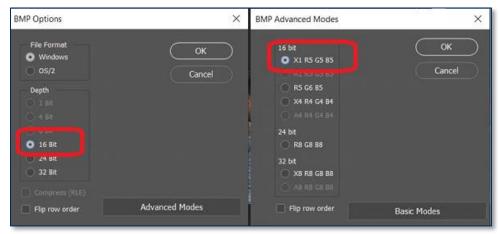
3) To close the device, press the **Disconnect** button.



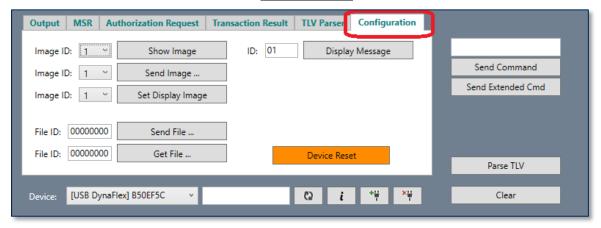
#### 3.5 Configuration

The following describes how to load and display images. An image replaces the Welcome screen when the device is in an idle connected state.

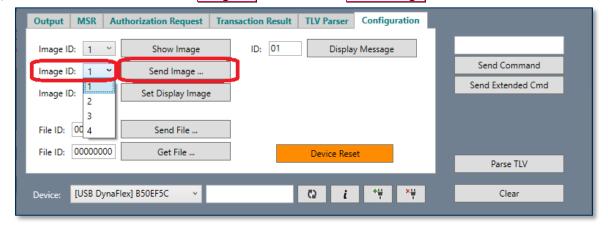
Please make sure the image you are trying to send to the device is in bitmap format, with 16-bit Depth and X1 R5 G5 B5 mode.



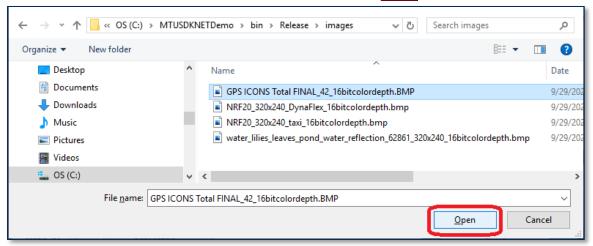
1) To send an image to the device, press the **Configuration** tab



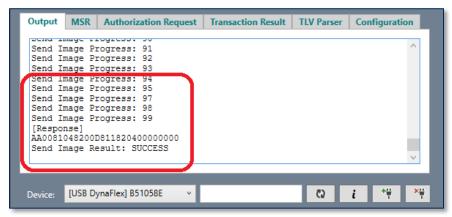
2) Select an ID number from the **Image ID** list. Press the **Send Image** button.



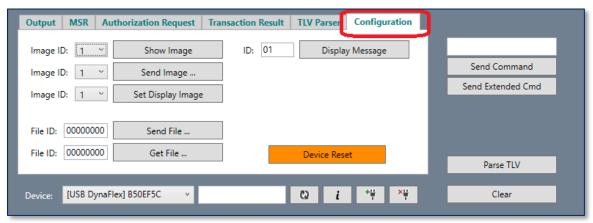
3) Navigate to an image bitmap file, select the file, then press the **Open** button.



4) View the progress of sending an image by selecting the **Output** tab. When completed the result will be similar to what is shown below.

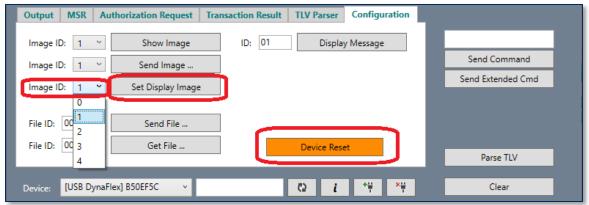


5) To set which image is to replace the Welcome screen, press the **Configuration** tab.

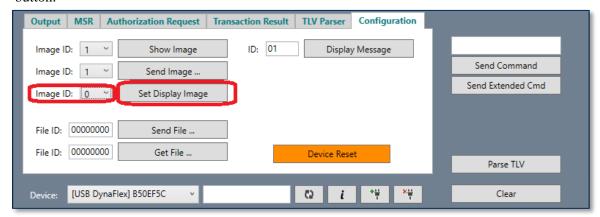


#### 3 - How to use the MTUSDKNET Demo

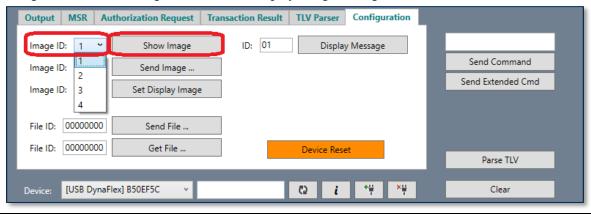
6) Select an ID from the **Image ID** list, press the **Set Display Image** button, then press the **Device Reset** button.



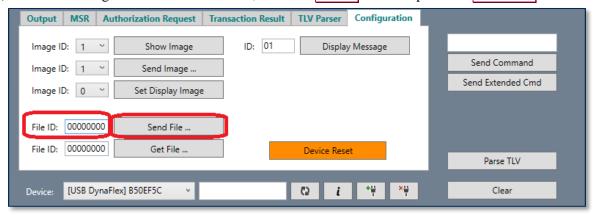
- 7) After the device resets, press the **Connect** button. The image will now be displayed on the device's idle screen.
- 8) If the display image is set to an ID that was not loaded, the device will display the Welcome screen.
- 9) To set the device back to the Welcome screen, select ID **0** from the **Image ID** list, press the **Set Display Image** button, then press the **Device Reset** button. After the reset, press the Connect button.



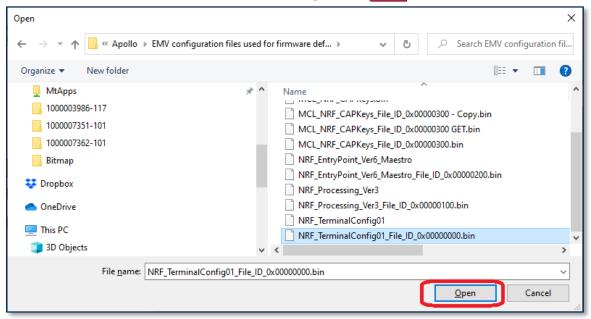
10) To show the image in the desire slot without restarting the device, select the **Image ID** you want to display, then press the **Show Image** button. Please note that after the device is restarted, the idle image will show the Image ID under Set Display Image setting.



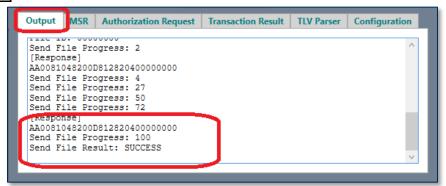
11) To send a configuration file to the device, enter the **File ID** and then press the **Send File** button.



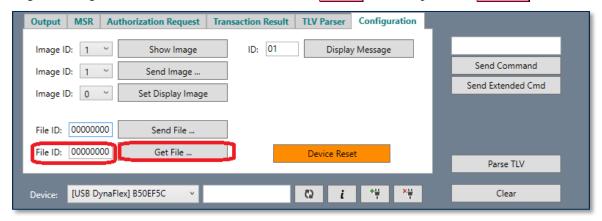
12) Select the file associated with that same file ID and press the **Open** button.



13) The **Output** will show the result of the file sent to the device.



14) To get a configuration file from the device, enter the **File ID** and then press the **Get File** button



15) Enter a desired file name and press the **Save** button.

