

# Micro Card Reader User Guide

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## Introduction

### Purpose

This user guide provides information on the Micro Card Reader, intended for professionals involved in the deployment of print management solutions including Tungsten (formerly Kofax), Equitrac, SafeCom, and former Nuance solutions. Besides, readers can be configured for other applications, e.g. using keyboard emulation.

### Micro Card Reader

The Micro Card Reader is a USB-connected RFID reader that allows users to authenticate themselves to an MFD using their contactless ID card, badge, tag, or key fob. When used with Tungsten software, it replaces the Copitrak ID card reader, Equitrac ID card reader, and Kofax MX card reader.

Key features:

- Module format allowing direct installation within an MFP pocket
- Multiple cables to support a variety of internal pocket connections
- Snap-together Brick housing and long cable for traditional external use cases

## Default configurations

The Micro Card Reader ships with various configurations:

Variant	Keyboard Emulation	Beeper	Returns
HF	Disabled	Enabled	Unique ID (UID) or Card Serial Number (CSN) from all hardware supported card types
Legic	Disabled	Enabled	Unique ID (UID) from LEGIC Prime and Advant cards Card Number from the Physical Access Control System (PACS) data in iCLASS cards formatted as: <ul style="list-style-type: none"> <li>• 26-bit Wiegand / H10301</li> <li>• 37-bit H10302</li> <li>• Corporate 1000 35-bit</li> <li>• Corporate 1000 48-bit</li> </ul> Other card types and formats ignored
Multi	Disabled	Enabled	Unique ID (UID) or Card Serial Number (CSN) from all hardware supported card types
Multi HID	Disabled	Enabled	Card Number from the Physical Access Control System (PACS) data in iCLASS, iCLASS SE, or iCLASS Seos cards formatted as: <ul style="list-style-type: none"> <li>• 26-bit Wiegand / H10301</li> <li>• 37-bit H10302</li> <li>• Corporate 1000 35-bit</li> <li>• Corporate 1000 48-bit</li> </ul> Other card types and formats ignored
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Readers can be configured to enable keyboard emulation, disable the beeper, accept only certain card types, or modify the output format. Consult the “Configuration” section for details.

**Important:** Keyboard emulation must be enabled before connection to Copitrak terminals and MFP clients.

## Installation

### In an HP HIP2 pocket

1. Use the following cable: 9 cm (4 inch), 90 degrees USB mini-B plug.



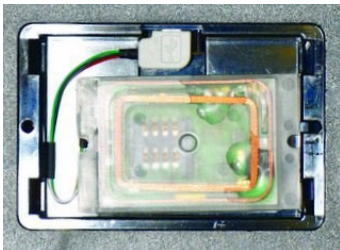
2. Insert the small white end of the cable into the Micro Card Reader module with the contacts facing down, and push the connector in until it clicks.



3. Pry the pocket cover open with a small flat bladed screwdriver.



4. Connect the USB mini-B Plug to the socket in the MFP pocket, and place the reader in the pocket with the antenna (larger) side facing up.



5. Snap the MFP cover shut, and install the "Place Card Here" sticker on the center of the cover.

## In a standard MFP pocket

1. Consult the MFP manufacturer's documentation for the pocket location and opening instructions.
2. Select the shortest cable with the appropriate connector for the MFP.
3. Insert the small white end of the cable into the Micro Card Reader module with the contacts facing down, and push the connector in until it clicks.



4. Fasten the antenna (larger) side of the reader to the MFP pocket cover with the 3M self-adhesive mounting tape.



5. Connect the USB cable to the socket in the MFP and follow the manufacturer's instructions for reassembly.
6. Install the "Place Card Here" sticker on the pocket cover directly over the center of the concealed reader.



## External installation (with the Brick housing)

1. Select the following cable: 1.8 m (6 foot), USB A plug



2. Insert the small white end of the cable into the Micro Card Reader module with the contacts facing down, and push the connector in until it clicks.



3. Fit the reader module into the top part of the housing, routing the cable through the wider strain relief feature.



4. Fit the bottom plate on the top part of the housing, so that the loops engage the tabs.



5. Press the cable end of the housing down until the parts snap together. No tools required.



## Opening the Brick housing

Firmly pull the parts of the housing apart while pushing a flat-bladed screwdriver into the release slots.



## Installing a Secure Access Module (SAM)

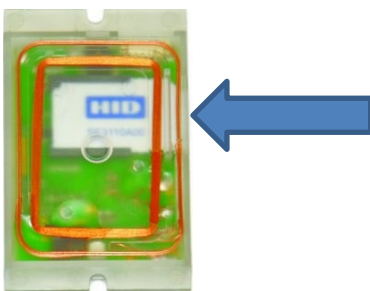
1. Position the reader module with the antenna (larger) side facing up.



2. With the SAM contacts down and the notch facing out, insert the SAM into the slot.

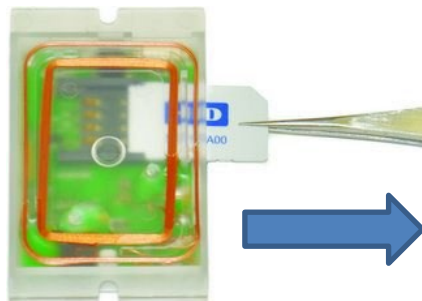


3. Use the edge of a coin or a flat-bladed screwdriver to push the SAM completely into the slot.



## Removing a Secure Access Module (SAM)

Grasp the SAM with a pair of tweezers and pull firmly to extract.



## Usage

### Presenting cards

Place and hold the card within approximately 1/4 inch (6 mm) of the Micro Card Reader until success is indicated by the LED or beeper.

Avoid moving or “swiping” the card across the reader like a traditional magnetic stripe card as this may disrupt the RFID link.

### Using phones with the BALTECH Mobile ID

With Mobile ID, employees can use their smartphones, as an alternative to their physical ID cards, to open doors or use similar card-reading applications. [Learn more](#).

For details about interacting with the Micro Card Reader using the Mobile ID app, see [this how-to](#).

### Beeper

Micro Card Readers contain a beeper which sounds whenever data is received from a presented card or mobile device.

You can enable or disable the beeper using the Reader Maintainer software, but its volume is not adjustable. Refer to the section “Setting the operating mode” for details.

**Note:** Some MFPs sound the reader’s beeper regardless of the reader configuration.

### LED indicator

The LED in the Micro Card Reader is green when it has power, blinking off and back to green when data is read from the presented card or mobile device. Readers configured in MX Compatible mode use a red LED instead of green.

**Note:** Some MFPs control the color and flash rate of the LED to reflect their login state and system status, regardless of the mode setting.

## Configuration

### Options

Micro Card Readers are configurable to:

- restrict operation to one or multiple card types
- read programmed card numbers, e.g. in a file, sector, or segment of the card
- enable support for [BALTECH Mobile ID](#)
- enable keyboard emulation as required by some MFP clients and terminals
- improve MFP compatibility using alternative USB keyboard settings
- create compatibility with other readers in a mixed fleet
- update the firmware to support new card types or features

### Tools

For new projects or configuration changes, we recommend using BALTECH ToolSuite. [Learn more](#)

For legacy projects, Reader Maintainer is still available but no longer updated.

For instructions, refer to *Kofax Reader Maintainer User Guide*.

All tools can be downloaded at [baltech.de/downloads-print-mgmt-en](http://baltech.de/downloads-print-mgmt-en).

## Troubleshooting

### Reader not responding, LED off

#### Condition 1

There is no response to card presentations and the reader LED is off.

#### Cause 1

The reader has no power.

#### Remedy 1

Connect the reader to another MFP, PC, or laptop. If the LED lights, then there was an issue with the USB port on the original MFP. It may be disabled, or the MFP was in deep sleep.

Consult the MFP documentation to resolve the issue.

#### Condition 2

The reader has been connected to another device, but the LED remains off.

#### Cause 2

The cable connection to the reader module is loose.

#### Remedy 2

The cable must be inserted into the module with the contacts facing down, then pushed until a slight click is felt:



### Further troubleshooting

Please refer to <https://docs.baltech.de/troubleshooting>.