How to set up an HID Omnikey 5427 card reader

The HID OMNIKEY 5427 CK reads most access cards, including 125 kHz HID Prox and EM cards and 13.56 MHz HID iCLASS and MIFARE cards. It works on HP printers and on Lexmark printers that run Print Director. The Lexmark XM1140 is not expected to work with card readers.

Print Director reads this reader in **keyboard wedge** mode, where it types the card number like a keyboard. The reader is not in that mode out of the box, so set it up on a Windows computer first.

Set the reader to keyboard wedge mode

1. Plug the reader into a USB port on a Windows computer. If Windows does not install its driver, download the driver for the OMNIKEY 5x27 CK from HID's website, install it, and plug the reader in again.
2. Open a web browser and go to `http://192.168.63.99/`. With the driver installed, this opens the reader's **OMNIKEY 5x27 CK Reader Management** page.
3. Click **Keyboard Wedge**.
4. Tick **Keyboard Wedge Enable** and **Boot Interface**.
5. Check that **Card Out Event Keystrokes** contains *[ENTER]*.

Choose the card data

The reader must send the number your site uses to identify cards, as a hex string followed by Enter, for example *014001c3*.

1. On the **Keyboard Wedge** tab, click **Card Data Selection**.
2. In **Card Type**, choose your card type.
3. Choose which data the reader sends. For example, for HID iCLASS cards, untick **CSN** and tick **PACS**.

Apply the changes and test

1. Click **System Config**, then **Apply Changes**.
2. Open Notepad and swipe a card. The reader should type a hex string and start a new line.

If the number is not the one you expect, change the card data selection and test again.

To change how the reader beeps and lights up, open **Contactless Config** > **LEDs & Buzzer**, change the settings and test them.

On an HP printer

1. Plug the reader into the HP printer's USB port. Until Print Director registers it, the panel may say that the USB device is not supported.
2. In Resource Manager, go to **Print Management** > **Shared Devices**, double-click the printer and click **Controller**. Check that **Controller Type** is **HP Integrated**.
3. On the **Authentication** page, set **Identification method** to **Card or keypad login** or **Card only**.
4. On the **Cards** page, under **USB device registration**, click **Choose known VID/PID**, choose **HID Omnikey 5427CK (keyboard wedge mode)** and click **OK**. This also sets **Byte conversion method** and **Data ordering** for that reader.
5. Under **Card reader settings**, choose whether users may register their own cards in **Self-register cards**.
6. Check that **Byte conversion method** is **Keyboard wedge codes for hex characters**.
7. Set **Start bit** and **Bit length** to pick out the card number. For example, for an AWID card with the number 1749045 printed on it, use **Start bit** 24 and **Bit length** 31.

Then initialise the printer, so the reader is registered on it: on the **Initialisation** page, click **Initialise** and check the output box. Click **OK + Refresh All**.

To check the result, swipe a few cards at the printer and click **View swipes** on the **Cards** page.

On a Lexmark printer

1. Plug the reader into the Lexmark printer's USB port.
2. In Resource Manager, go to **Print Management** > **Shared Devices**, and double-click the printer.
3. Open the **Controller** page and the **Cards** tab.
4. Swipe a few cards at the printer, then click **View swipes** to see how each swipe was read.
5. Adjust **Byte conversion method**, **Data ordering**, **Start bit** and **Bit length** until the card number matches the one printed on the card or held in your access control system. **Detect byte conversion** with **Normal** ordering is a good place to start.
6. Click **OK + Refresh All**.

To let users assign cards to themselves on a Lexmark printer, see *How to set up Print Director on a Lexmark printer*.

Related articles

- *HP Integrated controller settings*
- *Lexmark Integrated controller settings*
- *How to set up the HP Universal Card Reader X3D03A on an HP printer*
- *How to set up an Elatec card reader*

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