

Using HID's OSDP DTK to Configure the OSM-1000



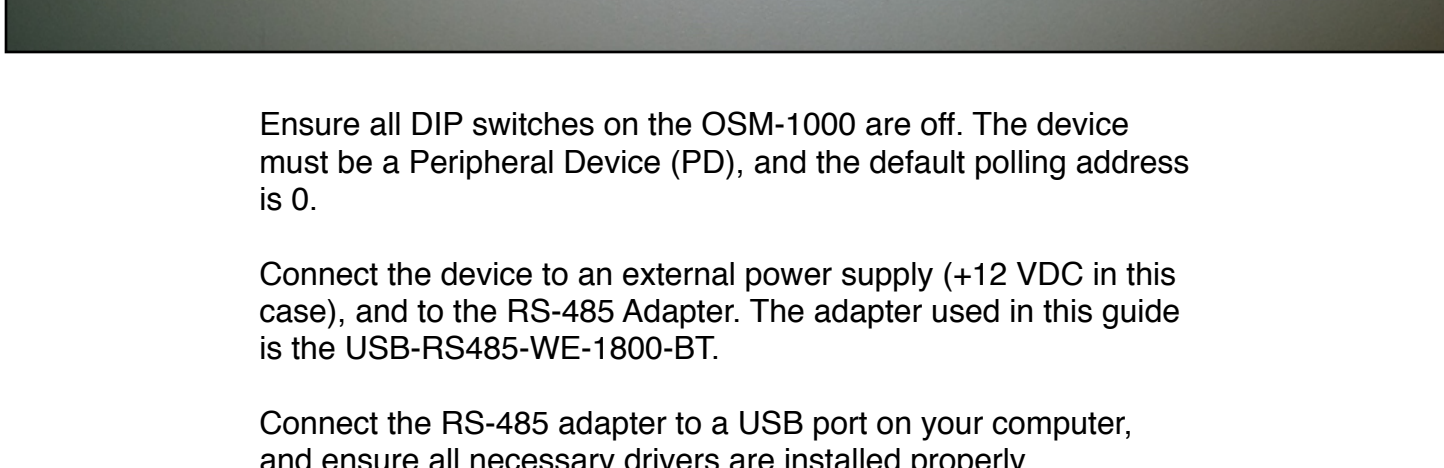
OSDP DTK is a tool published by HID Global Corporation to configure and test OSDP compliant devices, specifically their own OSDP readers and peripherals. This guide will focus on the usage of the OSDP DTK as it pertains to devices not manufactured by HID, specifically the OSM-1000.

To use the OSDP DTK, the following items are needed:

- + USB to RS-485 adapter
- + External power supply
- + OSDP compliant device
- + Computer running a supported operating system (Windows)
- + The OSDP DTK v2.0.0 software

PRELIMINARY

Step 1: Connect the Device



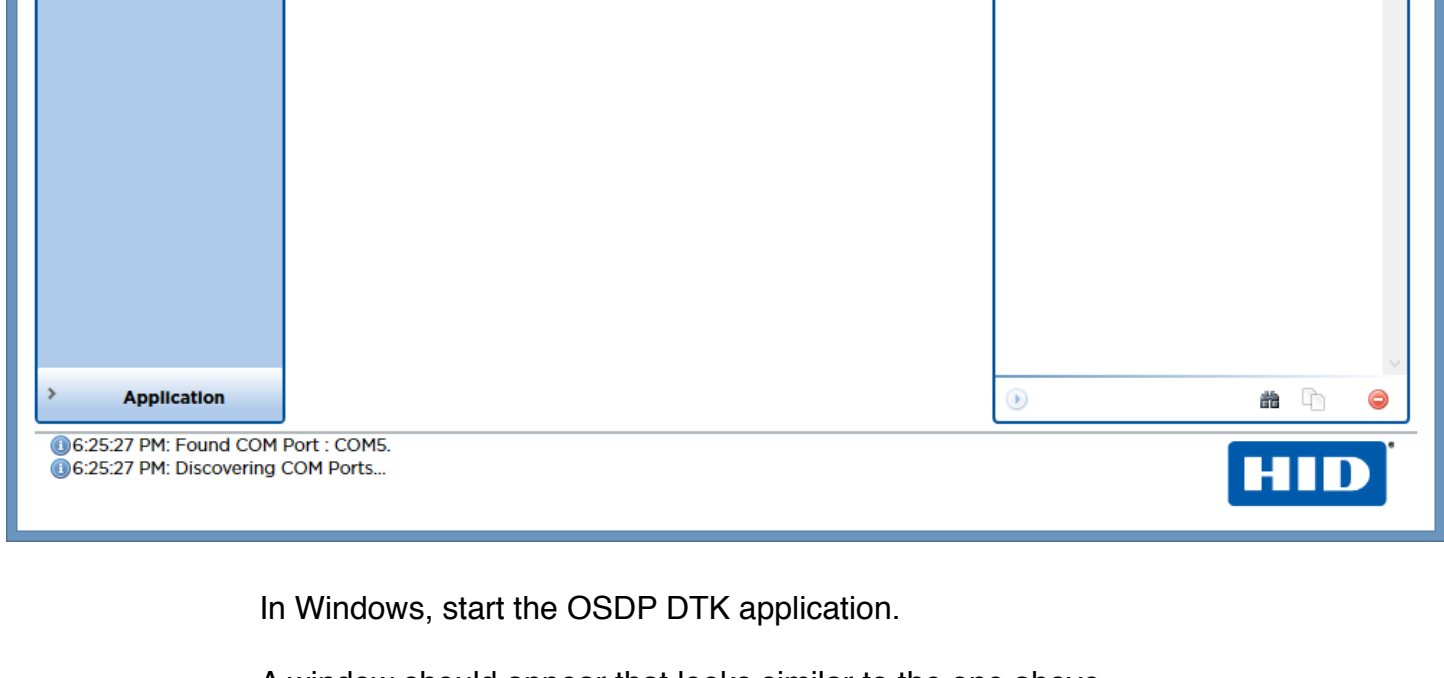
Ensure all DIP switches on the OSM-1000 are off. The device must be a Peripheral Device (PD), and the default polling address is 0.

Connect the device to an external power supply (+12 VDC in this case), and to the RS-485 Adapter. The adapter used in this guide is the USB-RS485-WE-1800-BT.

Connect the RS-485 adapter to a USB port on your computer, and ensure all necessary drivers are installed properly.

The OSM-1000's Status LED should cycle through red, blue, green, off, and white during its startup sequence. The LED should then slowly pulse red.

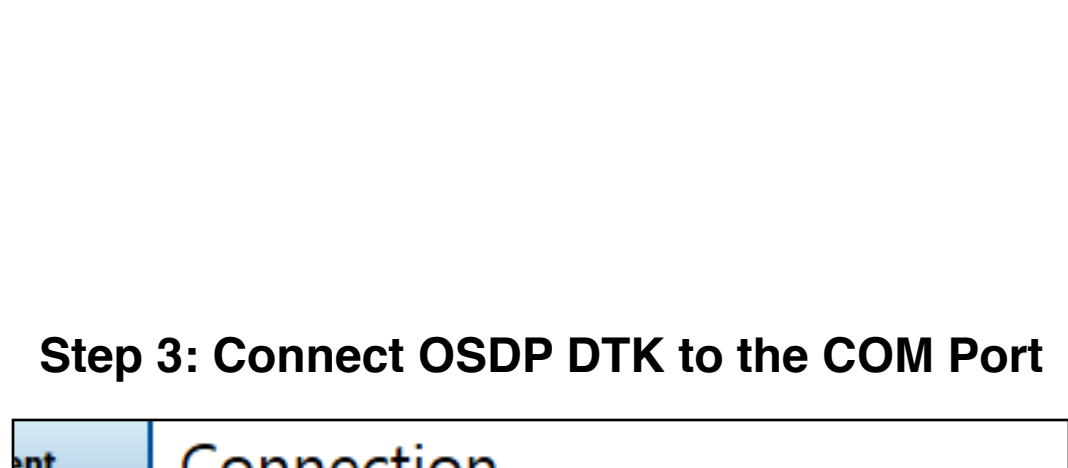
Step 2: Start OSDP DTK



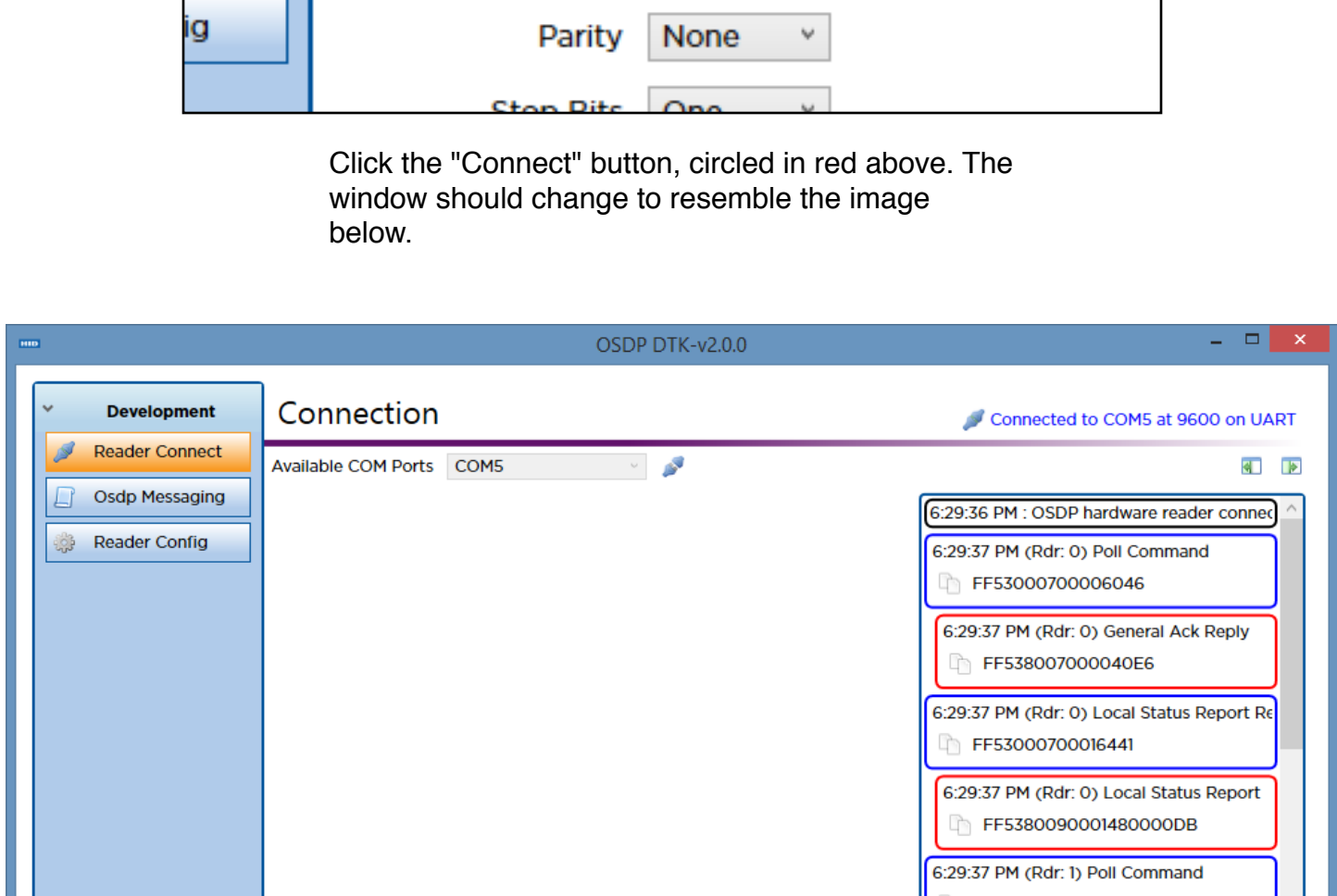
In Windows, start the OSDP DTK application.

A window should appear that looks similar to the one above. Ensure the RS-485 adapter is available in the list of "Available COM Ports".

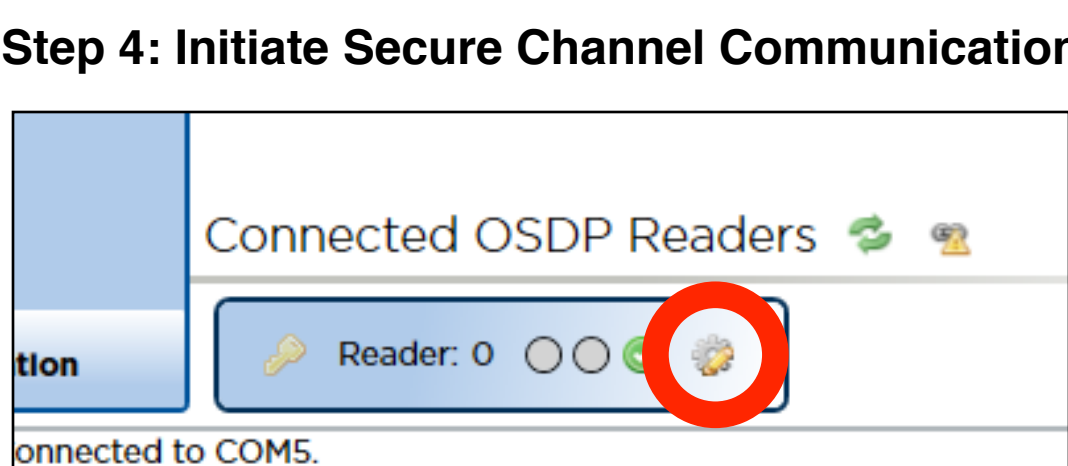
Step 3: Connect OSDP DTK to the COM Port



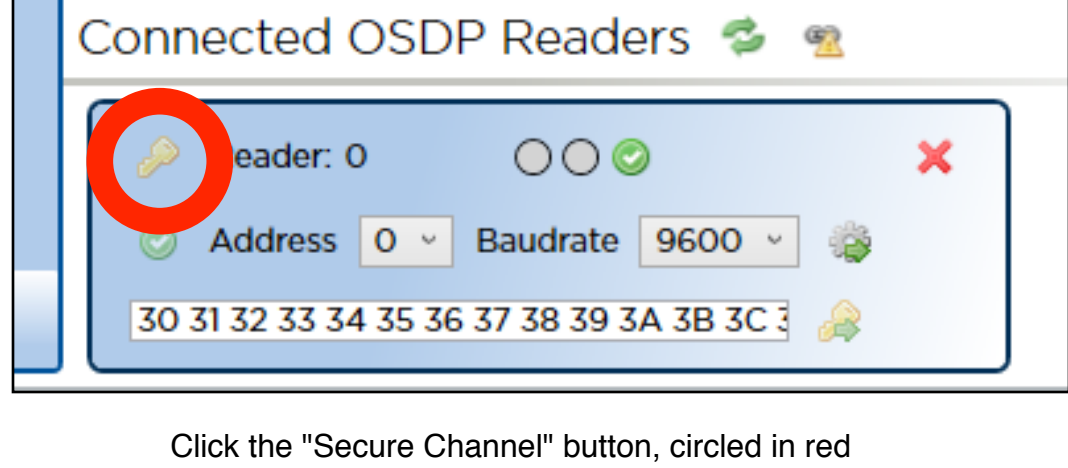
Click the "Connect" button, circled in red above. The window should change to resemble the image below.



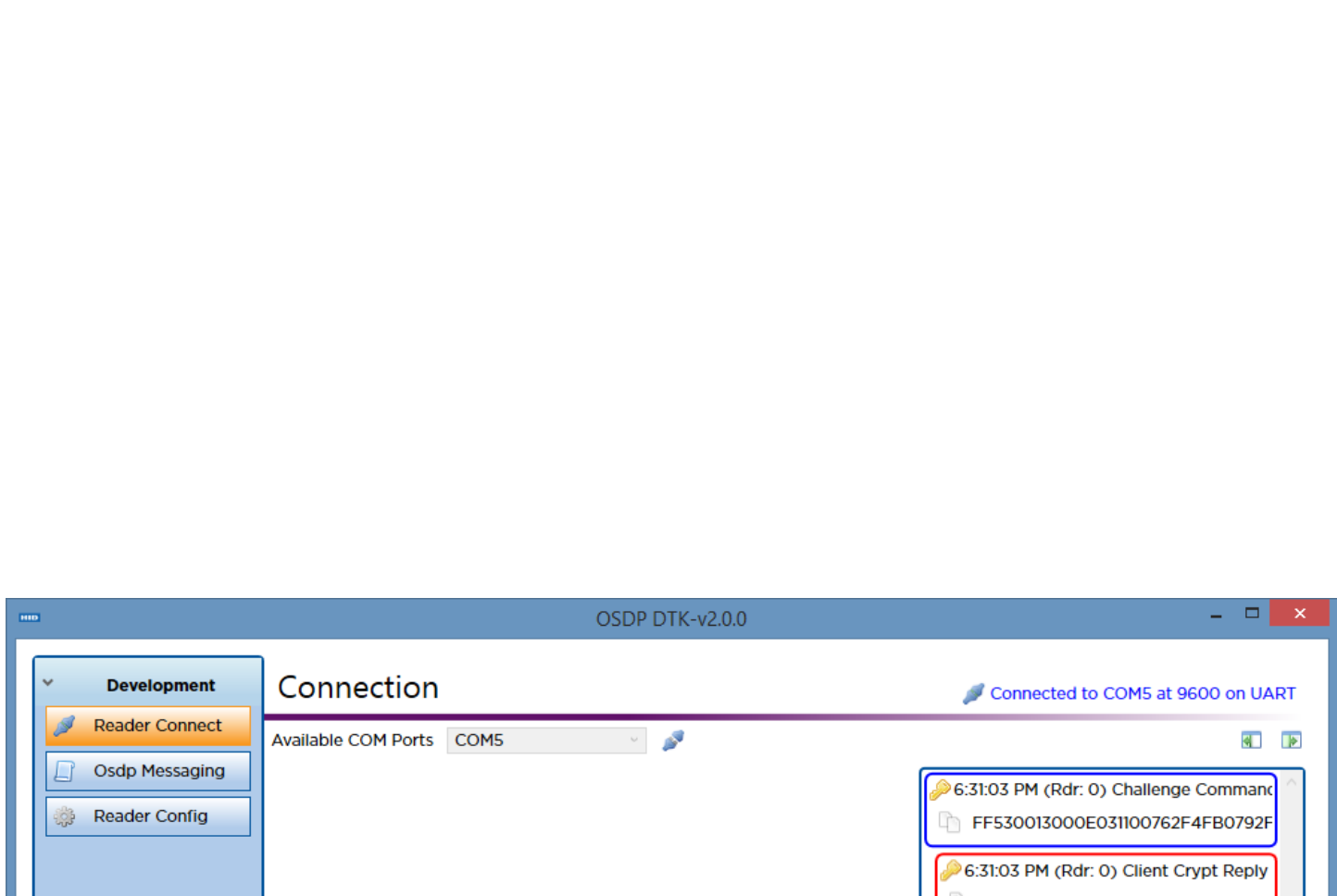
Step 4: Initiate Secure Channel Communication



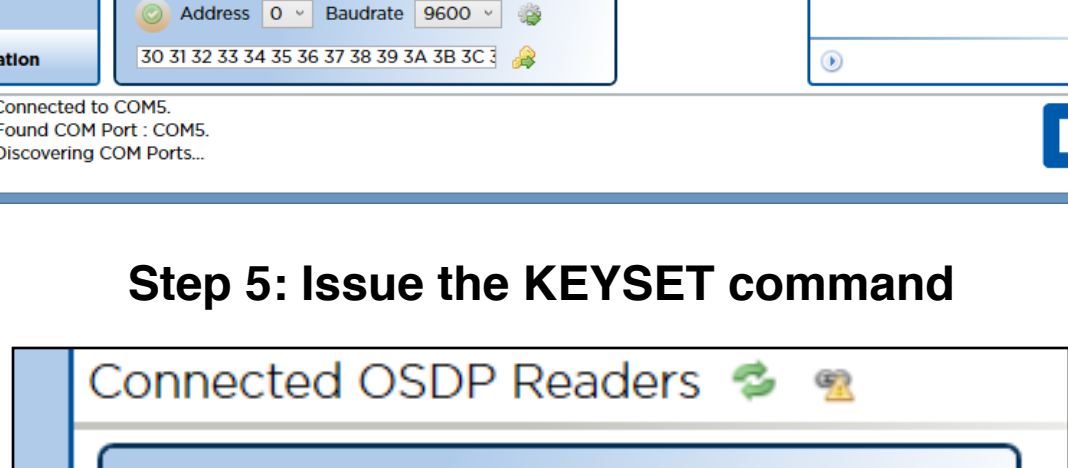
Click the "Configure" button, circled in red above. The colored box should expand to reveal additional controls, as pictured below.



Click the "Secure Channel" button, circled in red above. Four messages should be added to the list at the right of the screen, similar to the image below.



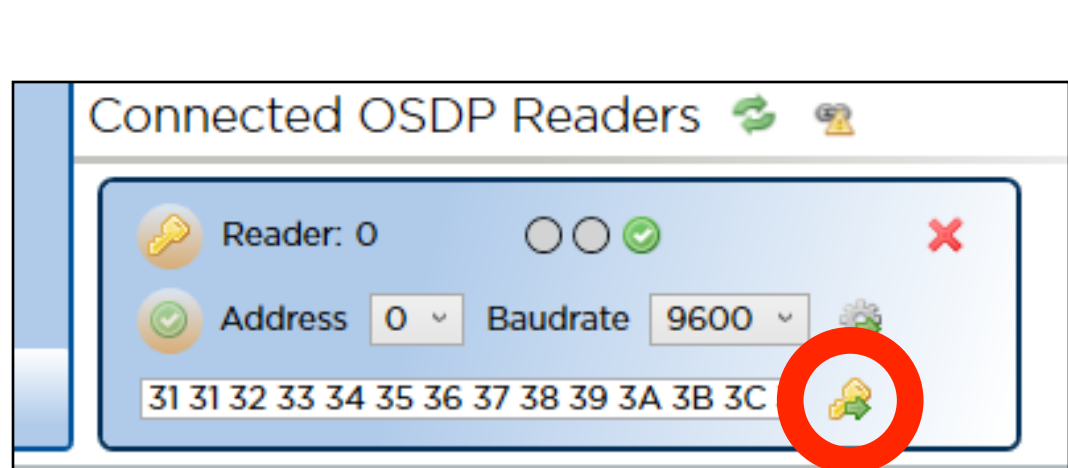
Step 5: Issue the KEYSET command



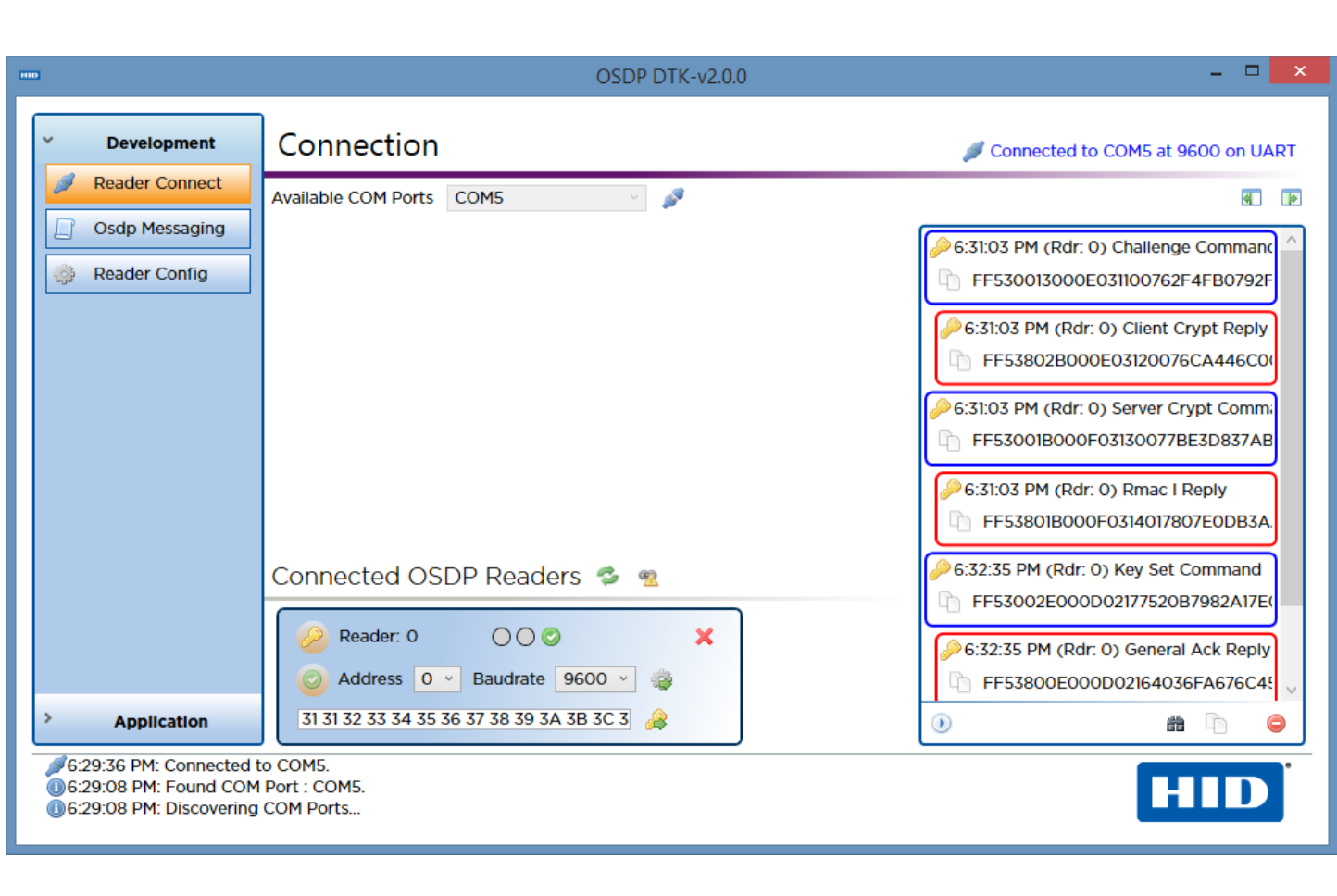
Type your custom encryption key into the "Secure Channel Key" field, highlighted in red above.

NOTE:

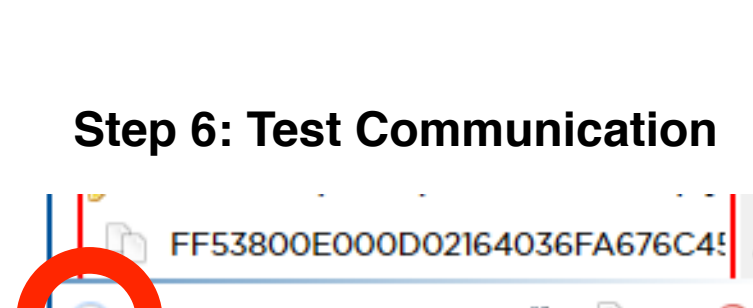
This key MUST be entered as 16 groups of 2 hexadecimal digits (numbers 0-9, and letters A-F) each, separated by spaces. It is important remember this key, and to keep it secret. Treat this key as one might treat a password.



Click the "Send Keyset Command" Button, circled in red above. Two messages should be added to the list at the right of the screen, similar to the image below.



Step 6: Test Communication



Click the "Start Polling" button, circled in red above. Messages should rapidly be added to the list at the right of the screen, and the status LED on the OSM-1000 should flash rapidly between red and magenta. Ensure each message labeled "Poll Command" has a reply labeled "General Ack Reply", and that each message has a key icon in its upper left corner. This indicates that the devices are successfully communicating in secure channel mode.