

# **Xpod<sup>®</sup> Evaluation Kit Instruction Sheet**

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# **Evaluation Kit Contents**

ld	Qty	Description
1	1	PCB, OEM Evaluation Kit Interface/Power Board
2	1	Pulse Oximeter
3	1	Sensor, Model 8000SM or alternative
4	1	USB Cable
5	4	AA Batteries
6	1	CD, OEM Evaluation Kit Software & USB Driver



Evaluation Kit Setup, Diagram 1



### Install OEM Evaluation Software and USB Driver from CD

- 1. Install CD into your computer\* CD-ROM drive/reader.
- 2. Install FTDI USB driver from the folder on the CD. The driver is in the folder named **FTDI DRIVER**.
- 3. Run the **setup.exe** file from the **root folder** on the CD.
  - a. Step through the setup/installation process.

## Setup and Confirm Operation

1. Assemble kit per the setup Diagram 1 on page 1.

**Note:** Do not connect the USB cable to the computer at this time.

- 2. Power the evaluation board ON/OFF switch to the ON setting.
  - a. Confirm the oximeter is powered ON by observing the red light is ON in the sensor. If the sensor red light is not lit, confirm:
    - Batteries are installed correctly and/or try new batteries
    - On/off switch is set to ON
    - Xpod and sensor is connected per Diagram 1
- 3. Install the USB cable to an available USB port on your computer. Directly after installing the USB cable, your computer will assign a communication port number to the device named "USB Serial Port (COMX)", where X is the com number.
  - a. To locate the com number, go to Windows Start -> Settings -> Control Panel -> System -> Hardware -> Device Manager -> Ports (COM&LPT). Locate the USB Serial Port (COMX) where X is the number assigned the pulse oximeter.

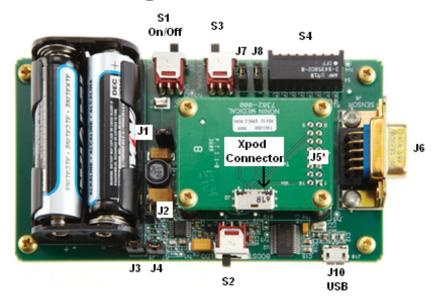
**Note:** Use the Classic View option while in Control Panel to make the "System" icon available.

- 4. Run the Nonin Evaluation Program by selecting **Windows Start -> Programs -> Nonin -> Nonin OEM Evaluation Program**.
  - a. With the OEM Evaluation Program open, complete the following steps to make the OEM Evaluation program work with the OEM Evaluation Kit.
    - In the upper menu bar of the program, select Options -> Comm Port.
      Then select the com number your computer has assigned to the pulse oximeter USB Serial Port.
    - 2) In the upper menu bar of the program, select **Options -> Data Format**. Select data format 2.
    - 3) Place finger in the sensor. Verify that the program begins displaying information from the oximeter.

<sup>\*</sup>Minimum computer requirements: IBM compatible PC with one USB port available. Windows XP. 30MB of disk space available and CD-ROM drive for installation disk.



# **XPOD Evaluation PCB Settings**



<sup>\*</sup>J5 connection is not visible. Xpod connector adapter board is installed into J5 connection.

Table 1. Jumper Settings for Default Configuration

Jumpers	J1	J2	J3	J4	J5	J6	J7	J8
Default Configuration	Jumper installed	Jumper installed	Jumper not installed	Jumper installed	XPOD Adapter	Not used	Jumper installed	Jumper installed

**Note:** The evaluation board supplies the oximeter's 3.3V input voltage using a regulator directly from two AA batteries, 3V in series. When the battery-supplied voltage is 1.28 V or less, the regulator shuts down the voltage to the oximeter.

Table 2. Switch Settings for Default Configuration

Switches	S1	S2	S3	S4
Default Configuration	Set to OFF position	Set to LDO position	Set to Battery position	See Table 3

Table 3. S4 Switch Options for Data Format Select

S4 Switch Options	S4 Dip1	S4 Dip2	S4 Dip3	S4 Dip4	S4 Dip5	S4 Dip6	S4 Dip7	S4 Dip8
Default Configuration	UP							
Data Format #1 select	DOWN	UP						
Data Format #2 select	UP	DOWN	UP	UP	UP	UP	UP	UP
Data Format #7 select	UP	UP	UP	UP	UP	UP	DOWN	UP