Daytona Sensors LLC User Instructions for Engine Controls and Instrumentation Systems USB Interface

CAUTION: CAREFULLY READ INSTRUCTIONS BEFORE PROCEEDING. NOT LEGAL FOR SALE OR USE IN CALIFORNIA OR ON ANY POLLUTION CONTROLLED VEHICLES.

INTRODUCTION

The Daytona Sensors USB Interface P/N 102004 provides PC connectivity for our CD-1 and SmartSpark ignition systems. The USB interface is compatible with Windows XP/Vista/7/8.

The USB interface has a switch that selects the operating mode. The "A" position is used for the CD-1 and the "B" position is used for the SmartSpark. The USB interface comes with a four terminal Deutsch connector that mates with the connector on the SmartSpark wire harness. An adapter is provided for use with the CD-1.

INSTALLATION

The USB interface is based on the FTDI FT232R chip and drivers that allow the unit to emulate a standard Windows RS-232 COM port. Updated Windows drivers, installation instructions and troubleshooting tips are available on the FTDI website at <u>www.ftdichip.com</u>. Additional information and troubleshooting tips can be found on the PC Link Tech FAQ on our website at <u>www.daytona-sensors.com</u>.

Figure 1 – USB Interface with Adapters



A new USB driver that simplifies the installation process is available. This installs as an executable file, similar to other Windows programs. The Windows Found New Hardware Wizard will then detect the USB device when it is first connected and automatically install the correct driver without the user having to browse out.

Before proceeding with installation, shutdown any other applications that may be running. For Windows Vista, you must disable the User Account Control (UAC) during installation. If you are not familiar with the UAC, please refer to the Vista UAC Tech Note on our website's PC Link Tech FAQ for details.

- 1. Make sure your USB interface is not connected to your PC.
- 2. Download the software from the Daytona Sensors website. When the Daytona Sensors autorun menu appears, click on Software. Scroll down and click on the USB Driver link. When the File Download dialog box appears, click on "Run this program from its current location." Ignore any security warnings and click on Yes to continue.
- 3. After installation of the driver is complete, connect the USB interface to the PC with the supplied USB cable. The Windows Found New Hardware Wizard will appear and complete installation of the USB interface.

COM PORT CONFIGURATION

After completing the installation steps outlined above, you must configure the new COM port using Device Manager.

- Windows XP: click Start, Settings, Control Panel, System, Hardware, and then Device Manager.
 Windows Vista: click Start, Control Panel, System and Maintenance, and then Device Manager.
 Windows 7: Click Start, Control Panel, System and Security, and then Device Manager. For more information, visit www.pcsupport.about.com.
- Scroll down to Ports (COM and LPT). The new USB interface will appear as a USB Serial Port. Click on this new port. Click on the Port Settings tab.
- Click on Advanced. In most cases the wizard will have installed your new USB Interface as COM5. Note the COM port number assigned for your system. For optimum performance, you should also change the BM Options Latency Timer to 2 msec as shown in Figure 2.

 Once you have configured a COM port number for your new unit, make sure that you use this same COM port selection in the software by using the Port Setup command from the Communications menu.

OM Port Number: COM5	•			ОК
USB Transfer Sizes				Cancel
Select lower settings to correct performance problems at low baud rates. Select higher settings for faster performance.				Defaults
Receive (Bytes):	4096 💌			
Transmit (Bytes):	4096 💌			
BM Options		Miscellaneous Options		
Select lower settings to correct response problems.		Serial Enumerator	~	
Latency Timer (msec):	2	Serial Printer		
	1 ²	Cancel If Power Off	Г	
Timeouts		Event On Surprise Removal	Г	
Minimum Read Timeout (msec):		Set RTS On Close	Г	
	0 -	Disable Modem Ctrl At Startup	_	

Figure 2 – COM Port Configuration

OPERATION

Connect the USB interface. An adapter harness is supplied with the USB interface for use with the CD-1. Connect the alligator clip on the black wire to ground and the Packard Weather Pack connector to the brown tach wire from the CD-1 wire harness. If the tach wire is not equipped with a Weather Pack connector, you can use the supplied brown jumper wire with an alligator clip to make the required connection. **Set the switch on the USB interface to the "A" position for the CD-1 and the "B" position for the SmartSpark.**. Turn the ignition switch on to provide power to the system.

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