



Dearborn Protocol Adapter (DPA) Is Now Wireless

The Dearborn Protocol Adapter, used in service bays worldwide as a PC interface for diagnostics, is now available in a wireless RF model - DPA RF. Using spread spectrum hopping modems, the DPA RF system minimizes handling of cables and PCs by eliminating the direct connection between the PC and the Truck.

How it works

An RF link means a direct line of sight is not needed for the connection, so vehicles can be outside the building while the data is analyzed inside and therefore, unexposed to the weather. And since it is the tool that is transported - not the computer, you don't need expensive and fragile portable PCs for data acquisition.

The DPA RF system has two components - the *Base Station* and the *Remote Station*. The Base Station connects to the PC and communicates with the Remote Station over an RF link. It can communicate with up to 10 Remote Stations. The Remote Station can communicate wirelessly to the Base Station or directly to the PC.

Create your own or use existing OEM application

The package is supplied with the TruckConnect™ software library and an RP1210A API to provide hardware flexibility across all platforms and networks. Typical applications include Wireless Diagnostics, PV/DV Testing, EOL Testing and Protocol Gateway.

More DPA RF information can be found at: www.dgtech.com/product/dparf/dparf.php



CAN Analyzer Interface Smaller And Configurable

DG's Super CAN Analysis Tool has been reduced to a 1/3 of the size and weight into the new S-CAT2 package. Another key feature is the ability to add other vehicle networks. Packaged with the Hercules analyzer, the expansion slot allows usage of the multiple protocols Hercules already supports - LIN, J1850 (Class 2, SCP, DCX) and CAN.

Software features

Hercules is a Windows-based analyzer that provides advanced features to develop and test in-vehicle networks. With the common timestamp of multiple protocols in one application, testing response time of gateways and other applications is now possible. Along with database decoding of CAN, LIN and J1850 variants (Class 2, SCP, and DCX), full support for GMLAN, ISO 15765 and J1979 diagnostic services are built in the software. Other key Hercules fea-

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- SAE Congress 2004
- Status of SAE J2534 - Pass-Thru Vehicle Programming API
- New Vehicle Networking Training Dates
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- Product Technical Support Tips



Dearborn Group Global News



Dearborn Group Has New Office In China

Dearborn Group has selected Eontronix Co, Ltd. as its product distributor and local technical service provider in both China and South Korea. This enhances DG's global presence as a leading manufacturer of in-vehicle network products and its ability to respond to customer needs.

Since its inception, Eontronix has represented the world leading technology and products in controls and diagnostics engineering for the Chinese automotive industry. With strong expertise in controls engineering, Eontronix also provides in-depth technical training and support for the products. The company headquarters is located in China's "Silicon Valley" - ZhongGuanCun, Beijing, and will set up offices in the major automotive centers. For more information visit their website at www.eontronix.com.

By teaming up with Dearborn Group, Eontronix strives to provide the automotive companies with the world class advanced tools, strong technical support and service they will need in research and development, engineering and the production process.

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Dearborn Electronics India Expands Support to the Pacific Rim

Dearborn Electronics India's (DEI) territory has been expanded to include Malaysia, Thailand, Singapore and the Philippines. This gives DEI increased responsibility for providing comprehensive products and services to these additional markets.

The company offers you the following services from its office in Bangalore, India.

- Dearborn Group in-vehicle network product sales
- Automotive network protocol training and support
- Customized DG products for specific applications
- Automotive software development services

DEI will also provide your company with custom in-house seminars on multiplexed network protocols. You can contact its sales office at 080-6632617.

Open House Successful in Chihuahua, Mexico

DG and its partner and Mexico Sales Rep, RBK, provided free technical sessions on CAN and LIN networks, flash programming and test engineering tools, along with live demos at the Holiday Inn Hotel in Chihuahua, Mexico in October 2003. The sessions were successful in generating the interest of attendees in the network overviews, new technology, the trends in the automotive industry and the products and capabilities of the RBK/DG team.

The live demos consisted of the following:

Gryphon/radio demo - demonstrating the ability to automate radio testing (or any other UUT), providing the advantages of test repeatability, reliability, accuracy and swifter test completion. Total radio control and configuration, either manual or automatic, was possible from a laptop. The actual automated test was developed by one of DG's Partner companies, Downtown Radio of Denver specifically for an OEM customer.

Gryphon/Mitsubishi LIN development board demo - provided the attendees with the visual example of the text presentation and the master/slave configuration and operation of the LIN network. LIN, as a CAN subsystem, is the choice of many companies looking for a "low cost" solution to low tech in-vehicle network systems.

Gryphon/Hercules/Silverado pick-up demo - presented the transmission messages (P,R,N,D,3,2,1) and RPM messages. The message traffic resulting from changing gears was shown on the Hercules software and the fluctuating RPMs from the rev-ing engine were displayed in a Hercules graph format.

RBK Low-Cost Portable In-Module Flash Programmer (IMP) demo - used in development and manufacturing areas to do module programming, diagnostic, testing, and repair.

Due to the positive response from customers, DG/RBK are planning to provide these open houses to other customer areas in the near future. For more information, please contact Marvin Speer from DG or Carlos Arias from RBK de Mexico 614.481.0300.

Technical Support Tips

A new installation guide is now available for Gryphon and S-CAT hardware. It explains how to connect and configure the hardware to communicate on Ethernet.

http://www.dgtech.com/product/gryphon/manual/gryphon_quickstart.pdf

Also look to the updated Gryphon User's manual for further explanation on terms such as DHCP client, DHCP server, and Static.

http://www.dgtech.com/product/gryphon/manual/gryphon_install2_0.zip

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tures include UEF and DBC database import, as well as signal graphing and monitoring.

Hardware features

S-CAT2, a lightweight and portable Ethernet-to-CAN hardware adapter, provides two on-board CAN channels: one HSCAN channel and one SWCAN channel. There is one expansion slot to support an extra plug-in module for added network or I/O modules.

Other key S-CAT2 features:

- Uses the latest GM Recommended Single-wire CAN circuitry
- Supports all current Gryphon plug-in modules
- Uses 10/100_T Ethernet connection for faster throughput
- Supports multi-user connection
- DLLs (including J2534) to create your own applications
- Wide power requirement of 6 - 40 VDC
- Includes 32 MB of RAM standard
- Runs all S-CAT legacy applications
- Pentium based for faster operation (130Mbyte internal burst rate)

More S-CAT2 information can be found at:
www.dgtech.com/product/scat2/scat2.php



SAE J2534 Final Specification Update

The newest Draft Version 3.12 appears likely to become the final Specification of the J2534 document.

Here are a few differences between Draft Versions 3.05 and 3.12 of the J2534 document.

- Revisions for Programmable power supply
- New feature to connect with a Pass-Thru device
- Added support for 9800 bps baud rate
- Changed numerous PassThru functions

You can get more information about the differences at:
www.dgtech.com/fyi/J2534_Diff_3_05-3_12.pdf

SAE PAPERS AND PRESENTATIONS on In-Vehicle Networks

The SAE 2004 World Congress will be held at the Cobo Center in Detroit, MI, from March 8-11. This is the world's largest automotive engineering exhibition that is segmented by specific technology. In addition to the many sales exhibits and business seminars, there will be over 1,500 papers presented in the various technical sessions.

For the last six consecutive years, Dearborn Group has been privileged to organize the In-Vehicle Networks technical session. The organizer's responsibility starts with the solicitation of paper offers from various professionals in the automotive and related industries, as well as from the academic world and government agencies. The organizer follows strict SAE rules and guidelines for obtaining a final approval for each paper.

The papers that are solicited for this session generally portray the latest developments and proposals for vehicle networks. Typical subjects covered are: new vehicle protocols, gateways, message handling, diagnostics, off-board connectivity and X-by-wire control. The presentations for this year's session will be given on Monday and Tuesday, March 8-9, 2004.

There are sixteen presentations scheduled, and their brief descriptions are listed below:

- Optical Data Communications
- Secure Vehicle Communications
- Vehicle Network Directory Tool
- Signal Behavior on Networks
- Electronic Controller Architecture
- Tools For Vehicle Diagnostics
- Time Triggered CAN
- Future Network Requirements
- Protocol Calibration Tools
- Sensor and Sensor Interfaces
- Steering Control
- Airbag Control Protocol
- MOST Protocol
- In-Vehicle Network Verification
- LIN Protocol
- Network Update

For complete details visit this site:

<http://www.sae.org/congress/index.htm>

VISIT DG AT SAE --- BOOTH 1927
See our latest products and live demonstrations

Seminars

You can attend the following Dearborn Group seminars. Our web site at <http://www.dgtech.com/training/overview.php> has more information about these seminars including course descriptions. *Custom in-house seminars* on all multiplexed network protocols are also available. You can contact our sales staff at (248) 488-2080 for details. (Seminars are held in Farmington Hills, Michigan unless noted).

CAN and Higher Layer Protocols

- ▶ Jan. 27-28
- ▶ Feb. 16-17 (Kokomo, IN)
- ▶ Feb. 24-25
- ▶ Mar. 2-3 (Chicago, IL)
- ▶ Mar. 23-24
- ▶ Mar. 25-26 (Kokomo, IN)
- ▶ Apr. 15-16 (Kokomo, IN)
- ▶ Apr. 20-21

KWP-2000 and Diagnostics on CAN

- ▶ Mar. 30

In-Vehicle Networking I

- ▶ Feb. 10-11
- ▶ Mar. 18-19
- ▶ Apr. 6-7

LIN

- ▶ Jan. 29
- ▶ Feb. 12
- ▶ Mar. 22
- ▶ Apr. 23

In-Vehicle Networking/CAN

- ▶ Feb. 18-19 (Huntsville, AL)

In-Vehicle Networking II

- ▶ Feb. 18-19 (Kokomo, IN)
- ▶ Feb. 26-27
- ▶ Mar. 16-17
- ▶ Mar. 30-31 (Kokomo, IN)
- ▶ Apr. 26-27 (Kokomo, IN)



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DG CONNECTIONS

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