HIOKI

New

8910 CAN ADAPTER

Recorders

CE

ISO14001
JQA-E-90091

Use your own recorder for

CAN Signal Visualization

CAN (Controller Area Network) is a serial data communications bus standard for transferring sensor data and control signals within vehicles during development or inspection.

The **8910 CAN ADAPTER** allows you to freely select signals on the CAN bus for conversion to analog and logic signals for recording and monitoring. Via the real-time output, monitor CAN signals on your own MEMORY HiCORDER or other data recorder. By using it with a recorder, you can capture and store CAN sensor data and control signals along with signals acquired from non-CAN-bus devices.

Record combinations of

CAN Data Monitoring

CAN Data Recording

Mixed Recording: Mechanical + Control

Mechanical Data

Output from various sensors such as strain gauges, vibration pickups and pressure sensors

Various MEMORY HiCORDER Input Units

Analog Outputs (-5 to +5 V)

MEMORY HiCORDER

or

Your existing data logger or other recorder

Logic Outputs (0/5 V)

Output of acquired CAN data after D/A conversion

HIOKI 8910 CAN ADAPTER

CONV MODE

POWER

CAN

ONLINE

CAL

ESC   SEL   ENT
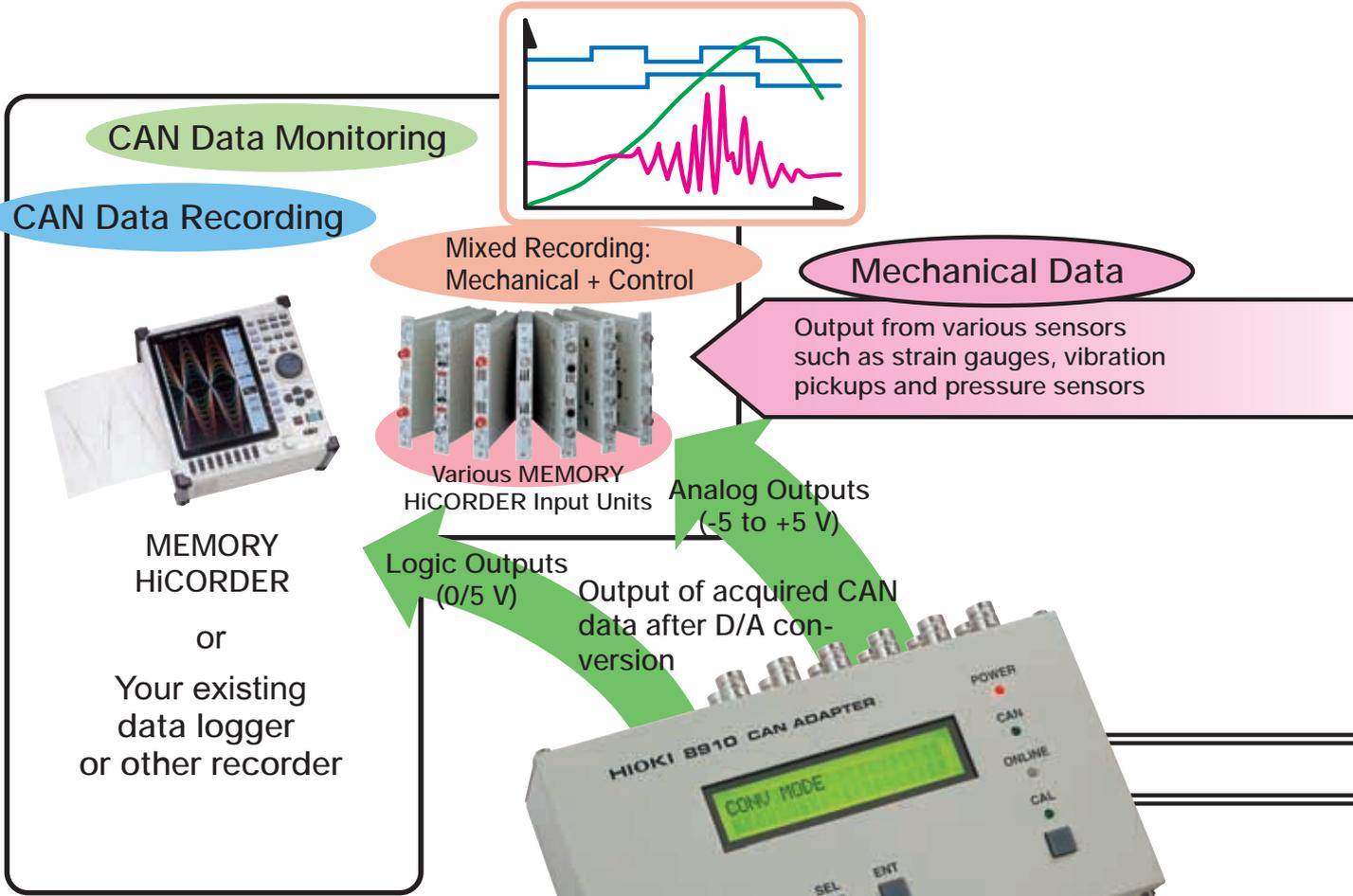
8910 CAN ADAPTER

RS-232C

RS-232C

CAN Setup Function
(Supplemental Function for MEMORY HiCORDERs)

By connecting a Model 8841, 8842 or 8826 MEMORY HiCORDER to the **8910 CAN ADAPTER** via RS-232C, the output channel and other settings can be made simply from the MEMORY HiCORDER screen.

In addition, scaling and units can be set automatically by loading setting data for the **8910** from storage media (floppy diskette, PC Card or MO disc) or via RS-232C.

CAN Setup Function Screen
(on Model 8841 MEMORY HiCORDER)

PC Card

MO disc   Floppy diskette

Settings for the 8910 stored on floppy diskette, PC Card or MO discs by a PC can be loaded by a MEMORY HiCORDER.

CAN bus data and other signals

Throttle opening,
rotation rate,
speed,
coolant temperature,
etc.

CAN

CAR

Control System Data

CAN Bus Input 1

CAN Bus Input 2
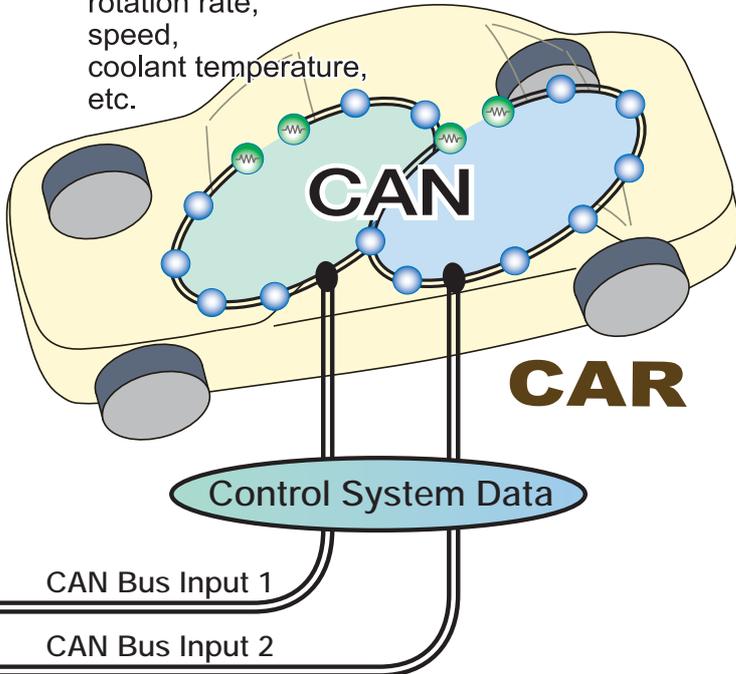
Features of the 8910 CAN ADAPTER

●**Easily monitor a variety of CAN data**

The 8910 CAN Adapter allows you to freely select signals on the CAN bus for conversion to analog and logic signals.

●**Monitor CAN signals on your existing MEMORY HiCORDER or similar recorder**

The 8910 CAN Adapter provides your selected CAN signals as analog (-5 to +5 V) or logic (0/5 V) outputs in real time. You can monitor CAN signals simply using your existing MEMORY HiCORDER or other data recorder.

●**Record combinations of CAN bus sensor data and control signals along with signals acquired from non-CAN-bus devices**

To verify proper engine response and to evaluate ECUs, control signals and mechanical functions need to be recorded simultaneously. With the 8910 CAN Adapter, you can record combinations of sensor data or control signals on the CAN bus and signals acquired from non-CAN-bus devices.

CAN Set Program (PC Software Application)

You can select CAN definition data and output channels using the CAN Set Windows application running on a PC. Setting data can also be sent via RS-232C to the 8910 CAN Adapter at the touch of a button.
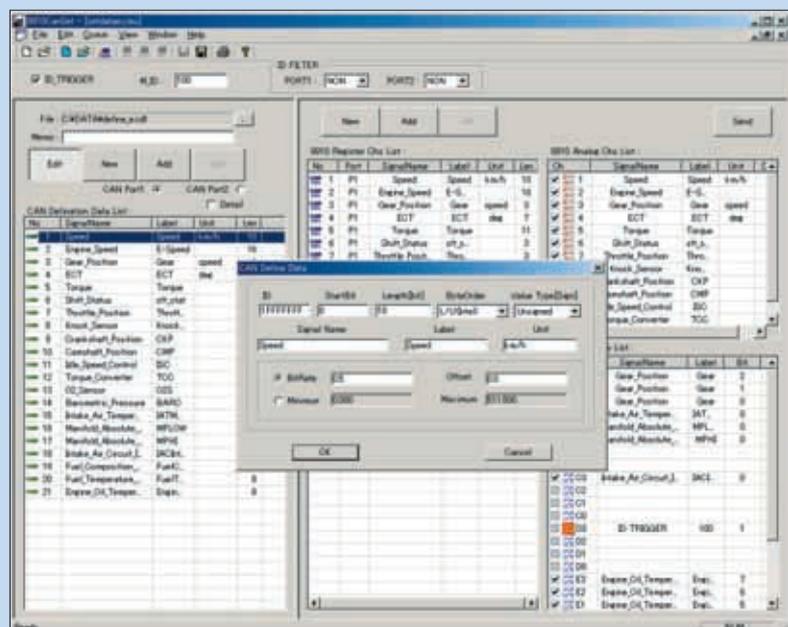
CAN Set Screen (PC Software Application)

■Specifications

8910 CAN ADAPTER General Specifications
(Accuracy specified at 23±5°C, 30 minutes after power on, guaranteed for one year)

CAN Input	Two CAN channels (listen-only)
CAN Protocol	CAN vers. 2.0B (Standard/Extended formats)
CAN Communication Speeds	125k, 250k, 500k and 1Mbps, High-Speed CAN (ISO 11898)
Output Channels	12 Analog + 6 Logic (24 bits)
Output Resolution	16 bits
Output Voltage	-5 to +5 V (Analog), 0/5 V (Logic)
Output Accuracy	±0.1% f.s.
Response Speed	1 ms or less (single-capture ID [with at least 3 ms output interval], with the same ID assigned to all analog and logic channels, and with ID filter on; the time from receipt of a CAN message until all analog and logic output is completed)
Interface	RS-232C (status settings)
Ambient Environment (non-condensating)	Operating Temp & Humidity: -10 to 55°C, 30 to 80% RH Storage Temp & Humidity: -20 to 70°C, 10 to 90 % RH
Applicable Standards	**Safety**: EN61010; **EMC**: EN61326
Power Supply	(1)Model **9418**-15 AC Adapter (supplies 12V DC / 2.5A from 100 to 240V AC mains) (2)10 to 30V DC (may be obtained from vehicle) (3)Obtain 10 to 30V DC from CAN input connector
External Dimensions	Approx. 180W × 50H × 100D mm
Weight	Approx. 940 g
Setup Software	(1) CAN Set Program (PC software application) (2) CAN Setup Function (supplemental function for MEMORY HiCORDERs)
Supplied Accessories	**9418**-15 AC Adapter (1), RS-232C Cable (1), **9713**-01 CAN Cable (1), CD-R [CAN Set Program, CAN Setup Function] (1)

Functional Specifications

Settings	(1)CAN definition data setup (various parameter settings for capturing data from the CAN bus) (2)CAN input port selection (3)Output channel setup (select channels to output captured CAN data), etc.
Setting Methods	(a)Above settings [(1) to (3)] can be made from the CAN Set program (b)Above settings (3) can be made from the **8910** itself or a MEMORY HiCORDER
Scaling	Only linear function supported (at the MEMORY HiCORDER side)

Top

Analog Output Connectors   Logic Output Connectors

Right side

RS-232C Connector   CAN Input Connectors
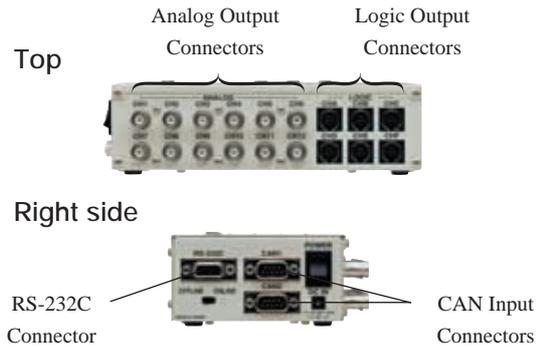
CAN Set Program (PC software application)

Supported Model	8910 CAN ADAPTER
Supplied Media	One CD-R
Operating System Environment	Windows 95, 98, Me, NT4.0 (SP3 or later), 2000, XP
Settings	CAN definition data, CAN input ports, output channels, ID trigger, ID filter, etc.
Communications	8910: RS-232C, MEMORY HiCORDER: Media (floppy diskette, PC Card, MO disc)
Saving	Saves CAN definition data and 8910 setting data

CAN Setup Function (Supplemental Function for MEMORY HiCORDERs)

Supported Recorder Models	Model 8826, 8841, 8842* MEMORY HiCORDERs
Settings	Output channels, MEMORY HiCORDER channels, D/A conversion format, logic bit assignments
Communications	8910: Model 9557 RS-232C CARD (PC Card) PC: Media (floppy diskette, PC Card, MO disc)
Saving	Six blocks of 8910 setting data can be saved in the backup memory of a MEMORY HiCORDER

* MEMORY HiCORDERs currently in use can be upgraded to support the 8910. Use the accessory CD supplied with the 8910 for the upgrade.

Ordering infomation

8910 CAN ADAPTER

●Compatible MEMORY HiCORDERs (capable of making settings on the 8910)

8841 MEMORY HiCORDER (use with input units sold separately)
8842 MEMORY HiCORDER (use with input units sold separately)
8826 MEMORY HiCORDER (use with input units sold separately)

●Compatible MEMORY HiCORDERs (waveform recording only)

8807-01/51 MEMORY HiCORDER
8808-01/51 MEMORY HiCORDER
8835-01 MEMORY HiCORDER (use with input units sold separately)

8852 MEMORY HiCORDER
8852-01 MEMORY HiCORDER
8855 MEMORY HiCORDER (use with input units sold separately)
8720 VISUAL HiCORDER (use with input units sold separately)

●Optional accessories

9713-01 CAN CABLE (unprocessed on one end, included accessory)
9713-02 CAN CABLE (for automobile connectors)
  *manufactured upon order; please inquire with your local distributor regarding specifications and delivery
9714-01 LOGIC CABLE (unprocessed on one end)

9714-02 LOGIC CABLE (use to connect to MEMORY HiCORDER)
9165 CONNECTION CORD (Metal BNC-to-metal BNC)
9217 CONNECTION CORD (Insulated BNC-to-insulated BNC, use to connect to insulated-BNC terminal on MEMORY HiCORDER input units)
9557 RS-232C CARD (compliant with the PCMCIA standard, for MEMORY HiCORDER)

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