



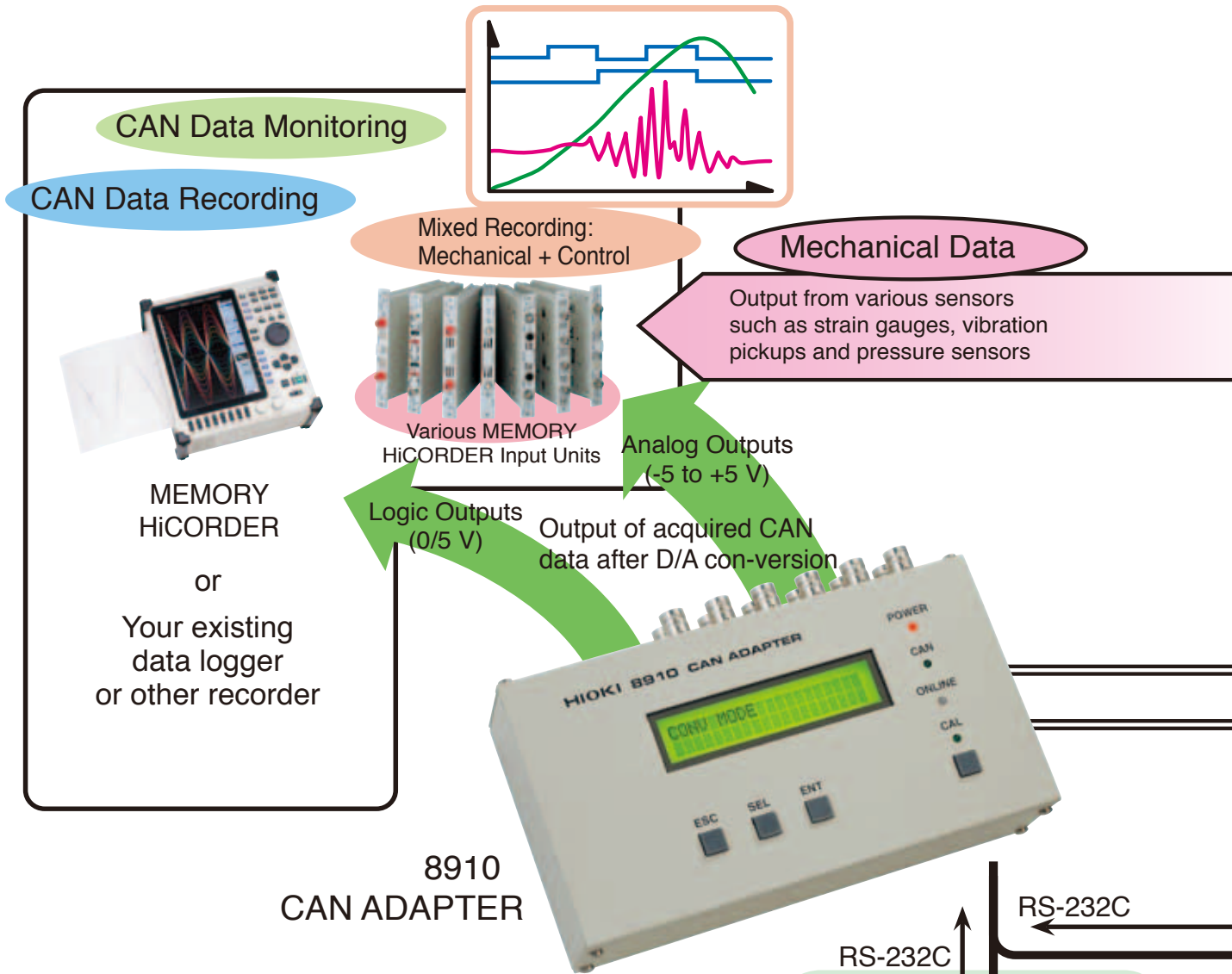
Use your own recorder for

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 CAN ADAPTER 8910 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 Setup Function (Supplemental Function for MEMORY HiCORDERs)

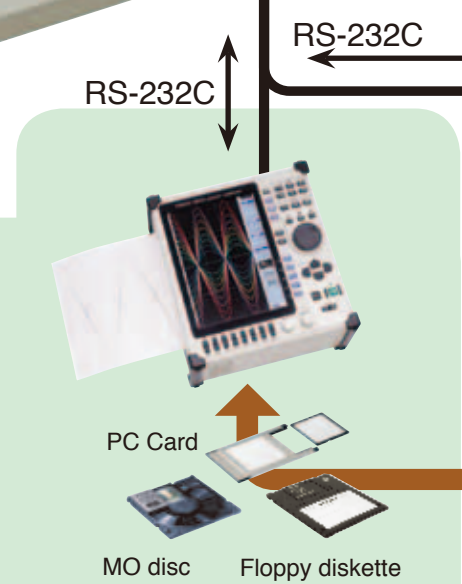
By connecting a MEMORY HiCORDER Model 8841, 8842 or 8826 to the CAN ADAPTER 8910 via RS-232C, the output channel and other settings can be made simply from the MEMORY HiCORDER screen.

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.

8910 LABEL CH	POS	LEN	STOR	D/A	8841 TYPE	CH
1 Speed	01	16bit	US	BI	1	
2 L-Speed	02	16bit	US	MONO	2	
3 Gear	03	16bit	US	MONO	3	
4 ECT	04	16bit	US	BI	4	
5 Torque	05	16bit	US	MONO	5	
6 Off stat	06	16bit	US	MONO	6	
7 ThrottlePosition	07	16bit	US	BI	7	
8 KnockSensor	08	16bit	US	MONO	8	
9 CKP	09	16bit	US	MONO	9	
10 CMP	0A	16bit	US	MONO	10	
11 ISC	0B	16bit	US	MONO	11	
12 TCC	0C	16bit	US	MONO	12	

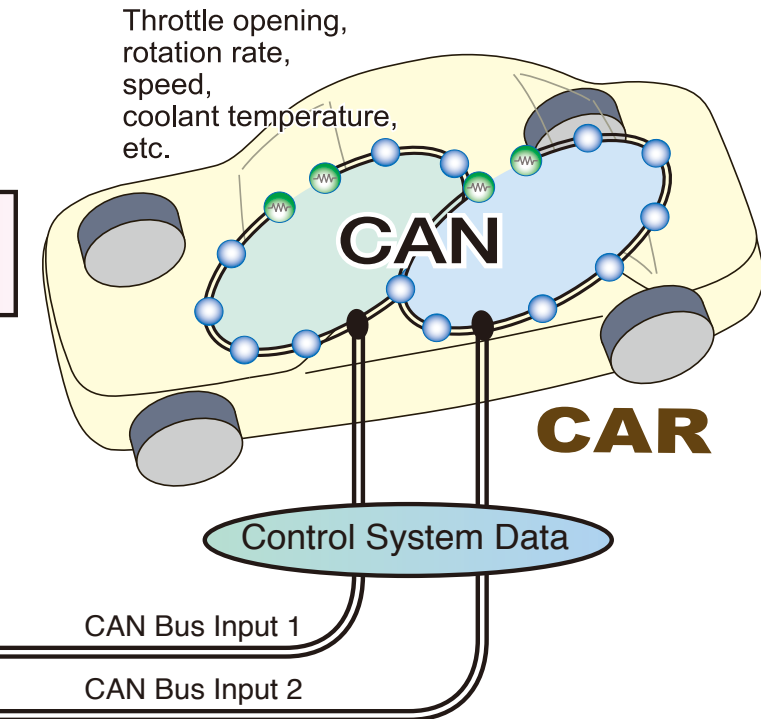
8910 LABEL CH	SP	8841 CH	8910 LABEL CH	SP	8841 CH
A0 IATh/Fur	0	A0	D0 OFF		
A1 Gear	0	A1	D1 OFF		
A2 Gear	1	A2	D2 OFF		
A3 Gear	2	A3	D3 ID TRIGGER	100	
B0 OFF		B0	E0 Engine01	4	----
B1 OFF		B1	F1 Engine01	5	----
B2 MPH1	0	B2	E2 Engine01	6	----
B3 MPH2	0	B3	E3 Engine01	7	----
B4 OFF		B4	F3 Engine01	8	----
C1 OFF		C1	F1 Engine01	1	----
C2 OFF		C2	F2 Engine01	2	----
C3 IACInter	0	C4	F3 Engine01	3	----

CAN Setup Function Screen
(on Model 8841 MEMORY HiCORDER)



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



Features of the CAN ADAPTER 8910

● Easily monitor a variety of CAN data

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

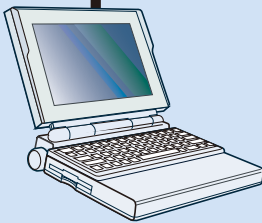
● Monitor CAN signals on your existing MEMORY HiCORDER or similar recorder

The CAN Adapter 8910 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.

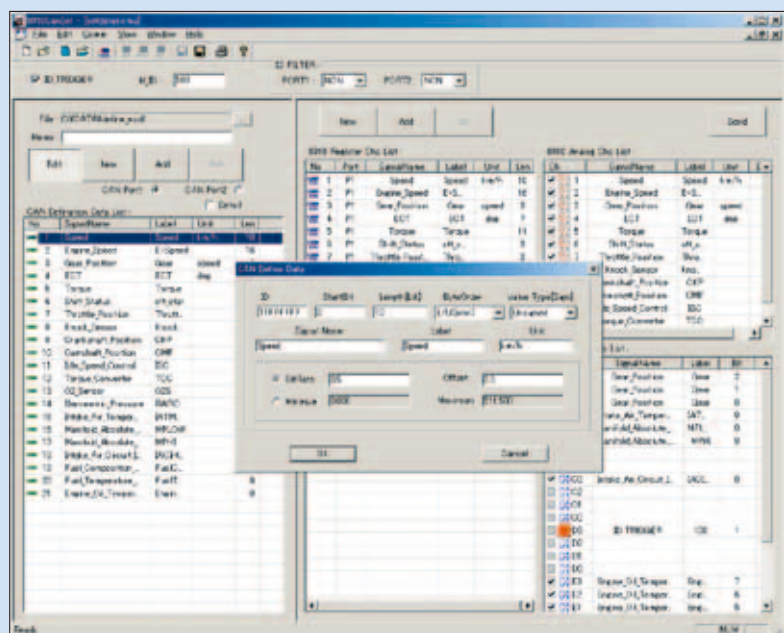
● Record combinations of CAN bus sensor data and control signals along with signals acquired from non-CAN-bus devices

To verify proper engine response and to evaluate ECUs, control signals and mechanical functions need to be recorded simultaneously. With the CAN Adapter 8910, 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 CAN Adapter 8910 at the touch of a button.

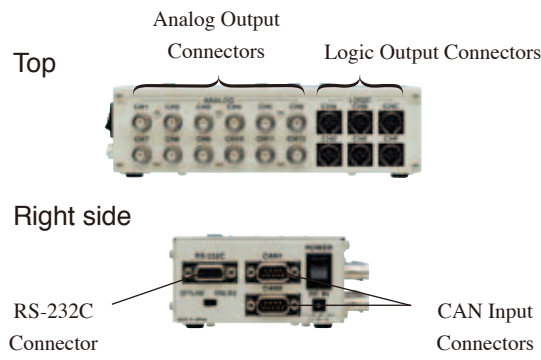


CAN Set Screen (PC Software Application)

Specifications (Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year)

8910 CAN ADAPTER General Specifications	
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)

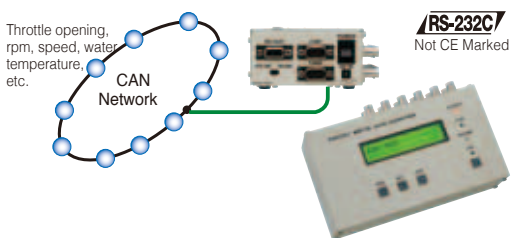


CAN Set Program (PC software application)	
Supported Model	8910 CAN ADAPTER
Supplied Media	One CD-R
Operating System Environment	Windows 95, 98, Me, NT4.0 (SP3 or later), 2000, XP
Settings	CAN definition data, CAN input ports, output channels, ID trigger, ID filter, etc.
Communications	8910: RS-232C, 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 information



Model : CAN ADAPTER 8910
 Model No. (Order Code) (Note)
8910 (For the 8841, 8826 and similar products)

The 9713-01 is bundled with the 8910, and the 9323 is converts large terminal of the 9323 to miniature logic terminal.

CAN CABLE 9713-01 Unprocessed on one end, 1.8 m (5.91 ft) length	LOGIC CABLE 9714-01 Unprocessed on one end, 1.5 m (4.92 ft) length	CONVERSION CABLE 9323 Used for connecting the 9320/9321/MR9321 and the 9324 relay to the Memory HiCorder with small logic terminal models * This cable is not required for the small-terminal types 9327, 9330-01, 9321-01 and MR9321-01.	CONNECTION CORD 9165 Cord has metallic BNC connectors at both ends, signal output use, 1.5 m (4.92 ft) length, not CE marked	CONNECTION CORD L9217 Cord has insulated BNC connectors at both ends, for signal output, 1.6 m (5.25 ft) length
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