

VW Data Recorder



Advantages

Wide Compatibility: The VW Data Recorder reads any pluck-type VW sensor from any manufacturer.

Simple Operation: Learn how to use the VW Data Recorder in just a few minutes. Most operations are performed by pressing a single key. Data retrieval is just as easy.

Reliable: Readings are stored in secure, non-volatile memory that keeps data even when batteries are fully discharged.

Spreadsheet Friendly: The Windows-based Manager program retrieves readings and stores them in ASCII file, ready to open and process with your spreadsheet program.

No Setup: The VW Data Recorder is always ready to use. There are no sensor lists or calibration factors to load.

No Special Parts: The VW Data Recorder uses standard cables and batteries. Built-in terminals eliminate the need for a jumper cable. The serial interface cable can be replaced at any computer store, and the standard D-cell batteries eliminate the need for a charger.

Applications

The VW Data Recorder is a recording readout for pluck-type vibrating wire sensors, RTDs, and thermistors.

The VW Data Recorder is simple to operate, stores up to 8000 readings, and can transfer the readings to a PC for processing.

Basic Operation

The VW Data Recorder has just three controls: an on/off switch, an Enter key, and a Change key.

To take a reading, switch on the power, connect the sensor, and press the Enter key. The reading appears.

To save a reading, press Enter twice more, once to confirm a sensor ID, and once to record the reading.

Settings

To change a setting, press the Change key. You can set the display to show Hz, Hz² or microstrain and choose thermistor or RTD for the type of temperature device built into your sensor. The Change key also lets you set a sensor ID when you save a reading.

Transferring Readings to a PC

Connect the Recorder to your PC and start the Manager program. Specify a file name and location for the readings, and two mouse clicks later, the data is on your PC, ready for your spreadsheet program.

Saved#	RecTime	Hz	Temperature
1	8/16/2001 3:46:43 PM	1287.743	28.83559
1	8/16/2001 3:46:54 PM	1287.697	28.84272
3	8/16/2001 3:47:24 PM	1291.314	28.83803
4	8/16/2001 3:47:46 PM	1289.615	28.71596
5	8/16/2001 3:48:11 PM	1289.162	28.87845
6	8/16/2001 3:48:47 PM	1288.859	28.76469
7	8/16/2001 3:49:08 PM	1289.017	28.76371
8	8/16/2001 3:49:28 PM	1288.689	29.07914
9	8/16/2001 3:49:54 PM	1289.171	28.80046
10	8/16/2001 3:50:26 PM	1289.358	28.95915
14	8/16/2001 3:50:46 PM	1289.025	28.96159
17	8/16/2001 3:51:18 PM	1289.341	

Retrieving Readings with Manager Software

VW DATA RECORDER

VW Data Recorder52613500

Includes readout, batteries, interface cable 50306869 for PC and CD containing manager software and user manual.

Sensor Compatibility: Reads any pluck-type vibrating wire sensor that operates between 450 and 6000 Hz. Also reads thermistor and RTD temperature sensors.

Range: 450 to 6000 Hz.

Resolution: 0.01% FS.

Accuracy: $\pm 0.02\%$ of Hz reading.

Temperature Measurement: -20 to 120 °C with $\pm 1^\circ\text{C}$ accuracy.

Displayed Units: Hz, Hz², microstrain, degrees C. Microstrain units are dedicated to VW spot-weldable strain gauge.

Sensor IDs: Stored readings are identified by date, time, and sensor ID, which is a number between 0 and 31. User assigns ID when saving a reading.

Memory Capacity: 8000 readings with ID, date, and time.

LCD: 2 line x 20 character, high contrast LCD with extended temperature rating.

Controls: On/Off switch with auto-off timer, keypad with two keys.

Connectors: Panel-mounted terminal for sensor cables, DB9 connector for serial interface cable.

Interface Cable: Included part 50306869 is a modem-type serial interface cable with DB9 connectors on either end.

Batteries: Two 1.5 volt alkaline D-cells provide about 60 hours of continuous use at 20 °C.

Environmental Limits: -20 to 50 °C.

Dimensions: 235 x 190 x 108 (9.25 x 7.5 x 4.25").

Weight: 1.5 kg (3.3 lb.).

VW DATA RECORDER MANAGER

VW Data Recorder Manager software is used to retrieve data from the recorder. It is also used to set the recorder's internal clock and a few other options. The software is supplied on CD with purchase of the recorder and can also be downloaded from www.slopeindicator.com.

System Requirements: Windows computer with serial port. If no serial port is available, a USB to serial adaptor is required.

Settings: Synchronize recorder's internal clock with PC or specify different date and time; set default sweep frequency; set default type of temperature sensor.

Data Retrieval: Choose to retrieve all readings or a selected range of readings. Readings are stored in ASCII format ready for import into a spreadsheet. VW readings are stored in Hz or Hz². VW spot-weldable strain gauge readings are stored in microstrain or Hz. Temperature readings are stored in degrees C.

OPTIONAL JUMPER CABLES

Jumper to Terminal Box 52613557

Jumper with Alligator Clips 52613550

Jumper to terminal box is required if sensors are terminated at universal terminal box 57711600. Approximately 2 m (6') long.

Jumper with alligator clips is useful for locations where the signal cable from the sensor is not easily connected to the terminals on the panel. Approximately 2 m (6') long.

TERMINAL BOXES



Terminal Box for 6 sensors57711606

Terminal Box for 12 Sensors57711600

Terminal Box for 24 Sensors97711624

Provides terminals for signal cable from 6, 12, or 24 sensors. Sensors are selected by rotary switch. Small 6-sensor box is 240 x 190 x 120 mm (9.5 x 7.5 x 4.75"). Larger 12 and 24-sensor box measures 290 x 345 x 135 mm (11.5 x 13.5 x 5.25").