



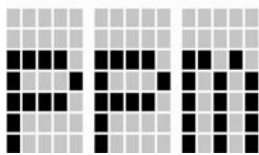
## Voltage Logger with Programmable Display

TandD's two-channel voltage logger is a remarkably versatile recording device, offering capabilities not found in other products on the market today. This unit is compact, battery operated, highly portable, yet incorporates a large multi-functional LCD display that shows not only current readings for both channels, but also provides device status information. The VR-71 includes front panel buttons that allow for push-to-start / stop operation, as well as configuration of recording and display parameters. Shipping complete with software, batteries and cables, the VR-71 comes ready to log true readings from an unprecedented variety of sensors.



### Choose Units & Scale for True Readings

Example of Created Dot Matrix Pattern



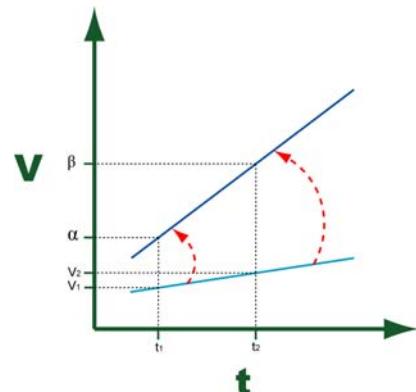
Example of Created Unit Display



Logging partial pressure of gas in Parts-Per-Million? Barometric pressure in Pascals? Fluid flow in Liters-Per-Second? No problem for the VR-71. Unprecedented in today's market, the VR-71's LCD includes a 3 character dot matrix units display area that

is completely customizable. This device comes with a preset selection to choose from, however with individually settable pixels, this logger can be programmed to display practically any units of measure.

To complete the picture, and allow for true readings, the VR-71 also provides for user programmable scale factors. Choose two adjustment points to scale the reading, or enter 'slope + offset' factors in the form of  $y = Ax + B$ . Either method allows for instrument outputs to reflect true readings for the unit of measure on the display and in the logged data.



#### Transform the readings:

0V → 0 to 100  
5V → 0 to 5000

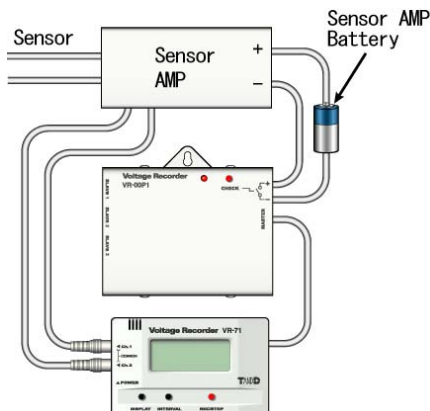
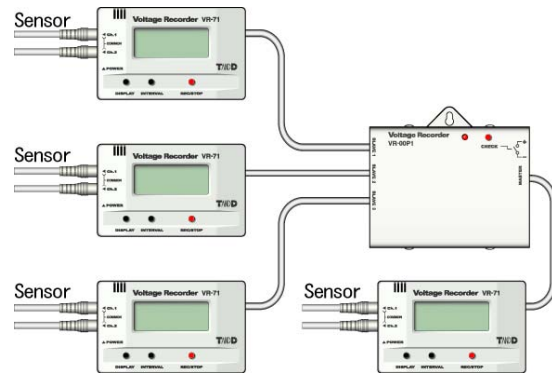
## Log Data from a Variety of Instruments

With the ability to scale the reading value and choose the units of display, the VR-71 is an ideal choice for recording the outputs from a wide variety of instruments. Most measurement instruments on the market today provide either a voltage, which can be logged directly, or a current, which can be logged using an optional 4 – 20 ma probe. The table below gives just a few examples of the types of devices and measurements that the VR-71 is capable of recording- and displaying.

Parameter	Instrument	Units	Display
Current	Ammeter	Amps, milliamps	A, ma
Pressure	Pressure Meter	Pounds / sq-in, Bars	Psi, Bar, mb
Weight, Strain	Load Cell	Pounds	Lbs
Acceleration	Accelerometer	Gravities	g
Light Intensity	Illuminometer	Lux	Lux
Barometric Pressure	Barometer	Pascals, Inches Hg	Pa, IHg
Magnetic Field	Hall Effect Device	Gauss	B
Rotation	Tachometer	Revolutions/min.	RPM
Flow	Flow Meter	Cu Ft/min, Liter/sec	Cfm, L/s

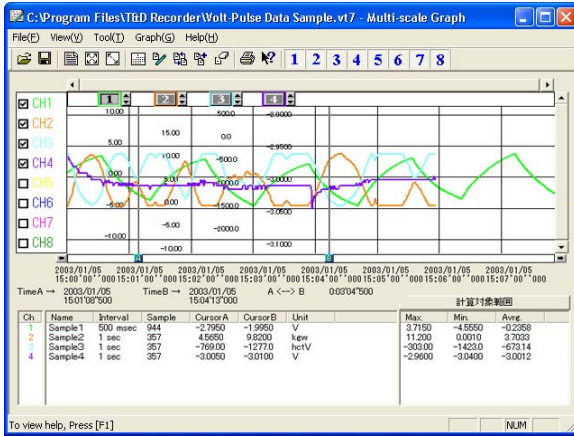
## Expansion Unit Increases Flexibility

Two channels not enough for your application? TandD's VR-00P1 brings additional flexibility to the product by allowing the attachment of up to three additional VR-71 units. This permits logging of up to 8 channels of data from a wide diversity of sensors with simultaneous readings on all units, so that data is logged synchronously.



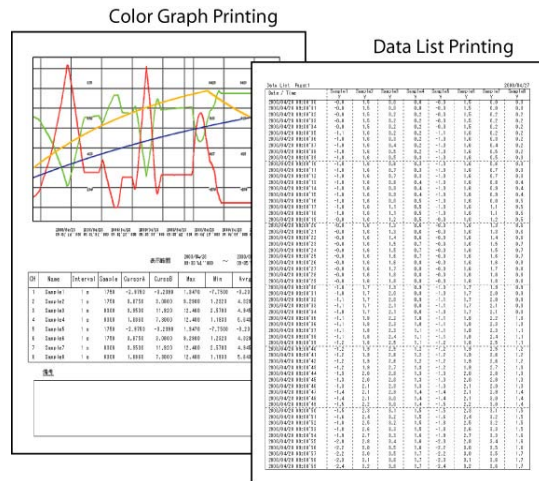
The VR-00P1 also has a switched output that can be used to synchronize the excitation voltage to an external sensor. This output can be configured to trigger the sensor or amplifier directly, or to switch power to a sensor on and off. The output can be set to apply power at a programmable time interval before data logging takes place. This provides an adjustable pre-application of power to allow sensor readings to stabilize before data is recorded.

# Multi-Graph Software Included



Every TR-71 ships with Voltage Recorder for Windows software, included at no extra charge. This easy to use, intuitive program provides for all aspects of system and device setup and control of data recording. It allows for simple downloading of logged data from the VR-71 units, and has built-in tools for file management and display. When recorded data is downloaded, a data collection report is displayed in an easy to view session list. These sessions can be saved to file in either graphical or tabular format.

Voltage Recorder for Windows allows for simultaneous, color-coded, graphical viewing of up to 8 channels of recorded data. The individual channels can be scaled, re-ordered, viewed or hidden according to needs. The view can be adjusted to taste using the built in zoom-in / zoom-out feature. Tabular files can be exported as ASCII text in CSV format for use in external application packages, such as Excel or LabView. In addition to storing, viewing and exporting data sessions, Voltage Recorder for Windows also includes a complete file print capability for printing hard copy in both graphical and tabular formats.



## Quick Specs

Data Capacity of Loggers:	16,000 Samples (8,000 x 2 Channels)
Sampling Rate:	50 / Sec. (20 msec) to 1 / hour
Measurement Range:	±1,2,6,15V or Auto Range
Display Resolution:	1 mV
Connectivity:	RS-232 Serial
Battery Life:	9 Mos. w/ 2 x AAA
Size (Approx.):	2"H x 3.5"L x 1"D
Temperature & Humidity:	0 - 50°C, 90% RH non-condensing

**TandD US, LLC.**

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