

Specification

Video IN	
Camera I/F	Gigabit Ethernet (Camera is required to use specified model)
Number of Channels	2ch
Frame Rate	100fps × 1ch (QVGA resolution : 240p)
	30fps × 1ch (HD resolution : 720p)
	30fps × 1ch (HD resolution : 720p) * p : progressive

Analog IN	
Number of Channels	4ch
Coupling	DC / AC / ICP™(TEDS applicable) Selectable for each ch.
A/D converter	delta-sigma (simultaneous sampling)
Sampling	Bandwidth[Hz] 40k 20k 10k 5k 2.5k 1.25k 630 100
	Sampling[Hz] 96k 48k 24k 12k 6k 3k 1.5k 240 (Bandwidth × 2.4)
Frequency	Bandwidth[Hz] 40k 20k 10k 5k 2k 1k 500 100
	Sampling[Hz] 102.4k 51.2k 25.6k 12.8k 5.12k 2.56k 1.28k 256(Bandwidth × 2.56)
Analog Output	None
A/D resolutions	16bit / 24bit selectable
Input Range	0.01 / 0.0316 / 0.1 / 0.316 / 1 / 2 / 3.16 / 10 [V]
Dynamic Range	100dB (20kHz bandwidth, 1V range, 24bit mode)
High Pass Filter	OFF / 5Hz (−12dB/oct)
Low Pass Filter	OFF / 200 / 500 / 1k / 2k [Hz] (−12dB/oct)
Absolute maximum input voltage	±50 V
Inter-channel phase difference	20kHz band and below : within 1 degree 40kHz band and below : within 3 degrees
ICP™ Curent	4mA / 24V

Digital IN / Pulse IN	
GPS	Position data, Time data
CAN	All packets data recorded (2 signals monitor available)
Pulse	1ch (Either Pulse or Ext. Trigger)

Other	
Video & Analog sync. Accuracy	< +/- 1fps (@ 30fps)
View while Recording	Video (1ch) / Analog Data / CAN
Recording START/STOP	Manual mode / Trigger mode
Trigger	Level, Timer, Repeat, External Pre Trigger, Post Trigger
Voice Memo	Available
Recording Media	CFast(up to 64 GB) / SDHC(up to 32 GB) *CFast media is required to record video
Synchronization	LX-100 series / WX-7000 series, VR-24 x 2
LCD	5.7 inch
Operation	Touch Panel + Button
Dimensions / Weight	W260 x D186 x H77 [mm] / Approx. 2.3[kg]
Power supply	DC 12 — 16 V AC 100 — 240 V (when using AC adapter)
Operating conditions	Operating temperature/humidity 0 to 40°C/10 to 80% (no condensation)
	Storage temperature/humidity −20 to 60°C/5 to 90% (no condensation)
	Operating air pressure 860 — 1060 hPa
	Vibration resistance MIL-STD-810E Figure 514.4-1, 2, 3

Recording Time (@ CFast 64 GB)

	Camera	Analog * 4ch [hours : minutes]		
		96kHz / 24bit	48kHz / 24bit	24kHz / 24bit
HD(1280x720 / 30fps)	1ch	2:37	2:57	3:09
VGA(640x480 / 30fps)	1ch	4:53	6:12	7:09
	2ch	3:06	3:34	3:52
QVGA(320x240 / 100fps)	1ch	5:21	6:58	8:12
—	—	11:34	23:08	46:17

This table shows approximate times, and record time is different depending on video data.

Accessories

- AC adapter
- Microphone (1 pc.)
- Ear-phone (1 pc.)
- Installation Manual (1 pc.)
- Operation Manual (included in CD)

Options

- Camera Basler ace series (specified model)



- Recording Media CFast / SDHC card



CFast is a flash memory card with the SATA interface which has enhanced format of the Compact Flash, and supports a higher maximum transfer rate.

- Remote Control ER-VRRC



Wired Remote Control Unit ER-VRRC

- Battery unit



Battery unit is attached.
* Battery and Battery Charger are not included.

- Carrying Bag



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TEAC

Video NV Recorder

VR-24

<http://datarecorder.jp/en>

Video 2 + 4 Analog
+ CAN/GPS/Pulse



Something is happening in test site that cannot find
only by analog data analysis.

Records 2ch video, 4ch analog, CAN, GPS and Pulse in perfect sync.
An All-In-One Data Recorder

The VR-24 answers When, Where, Why and How events heppen.

TEAC has innovated the analog and video recording technologies that have been used for decades in the field of testing environments.

The VR-24 is a data recorder that can record traditional video/analog signals along with CAN, GPS and Pulse data simultaneously in perfect sync. Support for wide bandwidth (40kHz). Because of its small lightweight design with battery operation capability, the VR-24 is an ideal stand-alone data recorder for on-site measurements. These additional data can reveal "hidden details" in your recorded data that you never knew was there.

All-in-one & Stand-alone

An all-in-one unit that records analog, video, CAN, GPS and Pulse data simultaneously in perfect sync.

Portable for field use

Small & lightweight design makes it easier to carry. Superior portability for field use.

*Can be operated on battery power (option).

Smaller than A4/Letter size

Small footprint
Compact design (W 10 1/4 x D 7 3/8 x H 3 1/8 in)

Light Weight

Approximately 2.3kg/5lbs.

Touch panel

Large 5.7 inch touch panel allows intuitive operation.



Graphically designed top screen and setting menu provide intuitive operation. Highly visible display allows users to check the recorded data immediately after the measurements. With a variety of display contents and full of useful functions, VR-24 is the data recorder for on-site measurement.

Wide Bandwidth 40kHz

Fulfilling increasing demands for high frequency noise measurements on EV and turbo chargers required when downsizing engines.

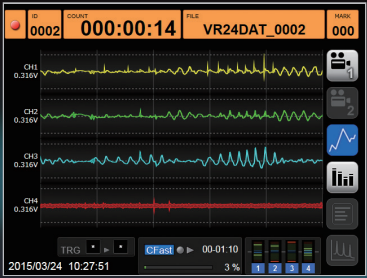
System configurations

Connected devices and cables are not included with the product.



Display Example

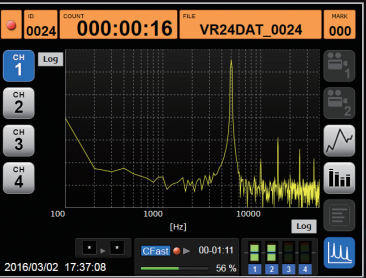
Analog signal can be shown as waveform



CAN, GPS and Pulse



FFT analysis



Recorded video and data can be reviewed on this screen.

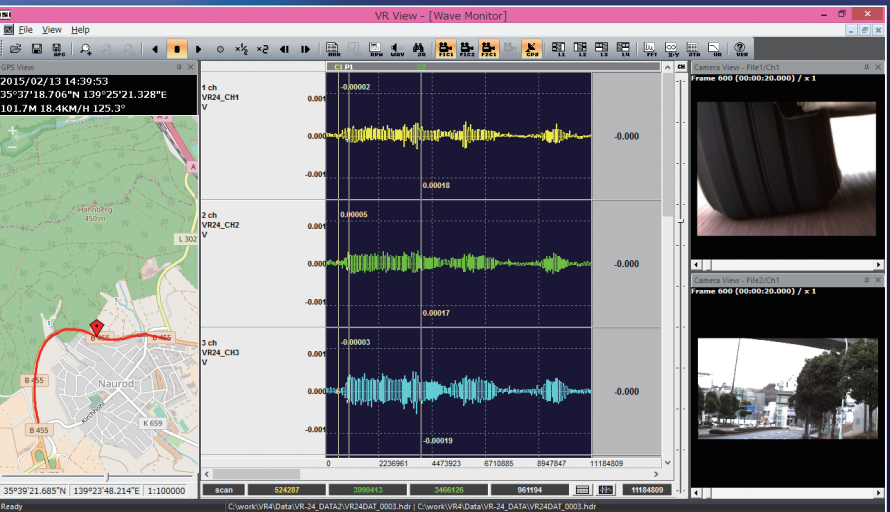


Optional Software

Displays of synchronous recording data in a single window

For Viewing and Analysis VR View

Optional VR-View allows you to view signal waveform, video and position data recorded by VR-24, on a single display. The function of watching synchronized video and waveforms would greatly help you analyze the phenomena you recorded.



Optional Software

VR-24 now has exciting new real-time analysis functions!

Real-time analysis viewer RT-View

To meet the needs of various industries, the VR-24 now can provide the following analysis screens in addition to its existing functions:

- Time diagram of four analog channels
- Power spectrum and Power spectral density
- 1/1, 1/3 Octave analysis
- FFT spectrogram
- Frequency response function
- Auto/Cross correlation

