

*Portable high-bandwidth Data Recorder with extended recording time.
 Selectable 16/24-bit resolution for optimal dynamic range.
 Multiple channel configurations to address a wide range of applications.*

Series 1		Series 2		Series 3		Series 4	
Fs	Band	Fs	Band	Fs	Band	Fs	Band
192.00 kHz	80.00 kHz	200.00 kHz	83.33 kHz	204.80 kHz	85.33 kHz	131.07 kHz	54.61 kHz
96.00 kHz	40.00 kHz	100.00 kHz	41.67 kHz	102.40 kHz	42.67 kHz	65.54 kHz	27.31 kHz
48.00 kHz	20.00 kHz	50.00 kHz	20.83 kHz	51.20 kHz	21.33 kHz	32.77 kHz	13.65 kHz
24.00 kHz	10.00 kHz	25.00 kHz	8.33 kHz	25.60 kHz	10.67 kHz	16.38 kHz	6.83 kHz
12.00 kHz	5.00 kHz	10.00 kHz	4.17 kHz	12.80 kHz	5.33 kHz	8.19 kHz	3.41 kHz
6.00 kHz	2.50 kHz	5.00 kHz	2.08 kHz	5.12 kHz	2.13 kHz	4.10 kHz	1.71 kHz
3.00 kHz	1.25 kHz	2.00 kHz	0.83 kHz	2.56 kHz	1.07 kHz	2.05 kHz	0.85 kHz
1.50 kHz	0.63 kHz	1.00 kHz	0.42 kHz	1.28 kHz	0.53 kHz	1.02 kHz	0.43 kHz

Sampling frequencies and bands Sampling frequency (Fs)/2.4 = band

Series 1	Corresponds to DAT/audio sampling frequencies	Series 2	Corresponds to integer frequencies
Series 3	Frequency axis during 2N FFT analysis : integrated in resolution	Series 4	Frequency axis during 2N FFT analysis : integrated in resolution

Approximate total recording times for a 1TB RDX HDD (in days, hours:minutes:seconds)

Fs(kHz)	Band(kHz)	16-bit						24-bit						
		8ch	16ch	32ch	64ch	96ch	128ch	8ch	16ch	32ch	64ch	96ch	128ch	
192.00	80.00	3 days, 18:10	1 day, 21:09					1 day, 21:09						
96.00	40.00	7 days, 11:53	3 days, 18:10	1 day, 21:09				3 days, 18:10	1 day, 21:09					
48.00	20.00	14 days, 21:56	7 days, 11:53	3 days, 18:10	1 day, 21:09			7 days, 11:53	3 days, 18:10	1 day, 21:09				
24.00	10.00	29 days, 12:34	14 days, 21:56	7 days, 11:53	3 days, 18:10	2 days, 12:10	1 day, 21:09	14 days, 21:56	7 days, 11:53	3 days, 18:10	1 day, 21:09			
12.00	5.00	57 days, 20:48	29 days, 12:34	14 days, 21:56	7 days, 11:53	5 days, 0:20	3 days, 18:10	29 days, 12:34	14 days, 21:56	7 days, 11:53	3 days, 18:10	2 day, 12:10	1 day, 21:09	
6.00	2.50	111 days, 6:48	57 days, 20:48	29 days, 12:34	14 days, 21:56	10 days, 0:41	7 days, 11:53	57 days, 20:48	29 days, 12:34	14 days, 21:56	7 days, 11:53	5 days, 0:20	3 days, 18:10	
3.00	1.25	206 days, 16:03	111 days, 6:48	57 days, 20:48	29 days, 12:34	20 days, 1:23	14 days, 21:56	111 days, 6:48	57 days, 20:48	29 days, 12:34	14 days, 21:56	10 days, 0:41	7 days, 11:53	
1.50	0.63	361 days, 16:06	206 days, 16:03	111 days, 6:48	57 days, 20:48	40 days, 2:47	29 days, 12:34	206 days, 16:03	111 days, 6:48	57 days, 20:48	29 days, 12:34	20 days, 1:23	14 days, 21:56	

Approximate total recording times for a 32GB SDHC (in days, hours:minutes:seconds)

Fs(kHz)	Band(kHz)	16-bit						24-bit						
		8ch	16ch	32ch	64ch	96ch	128ch	8ch	16ch	32ch	64ch	96ch	128ch	
192.00	80.00													
96.00	40.00		5:44						5:44					
48.00	20.00		11:26	5:44					11:26	5:44				
24.00	10.00		22:38	11:26	5:44				22:38	11:26	5:44			
12.00	5.00	1 day, 20:22	22:38	11:26	5:44				22:38	11:26	5:44			
6.00	2.50	3 days, 13:19	1 day, 20:22	22:38	11:26	7:39	5:44	1 day, 20:22	22:38	11:26	5:44			
3.00	1.25	6 days, 14:28	3 days, 13:19	1 day, 20:22	22:38	15:18	11:26	3 days, 13:19	1 day, 20:22	22:38	11:26	7:39	5:44	
1.50	0.63	11 days, 13:19	6 days, 14:28	3 days, 13:19	1 day, 20:22	1 day, 6:36	22:38	6 days, 14:28	3 days, 13:19	1 day, 20:22	22:38	15:18	11:26	

Specifications

Analog signal input/output
 Number of input/output 16ch
 Channels 32ch, 64ch, 96ch, 128ch : by adding 16-channel Expansion units
 Number of channels that can be recorded simultaneously

Series	Fs (kHz)				RDX recording 6MB/s		SDHC recording 1.5MB/s	
	Series 1	Series 2	Series 3	Series 4	16bit	24bit	16bit	24bit
192.00	200.00	204.80	131.07	16ch	8ch	-	-	
96.00	100.00	102.40	65.54	32ch	16ch	8ch	-	
48.00	50.00	51.20	32.77	64ch	32ch	16ch	8ch	
24.00	20.00	25.60	16.38	128ch	64ch	32ch	16ch	
12.00	10.00	12.80	8.19	128ch	128ch	64ch	32ch	
6.00	5.00	5.12	4.10	128ch	128ch	128ch	64ch	
3.00	2.00	2.56	2.05	128ch	128ch	128ch	128ch	
1.50	1.00	1.28	1.02	128ch	128ch	128ch	128ch	

Input DC, AC, ICP™ (TEDS Supported)
Input Range ±0.1, 0.2, 0.5, 1, 2, 5, 10, 20V
Output Range ±1 to 5V (selectable in 0.1 V steps)
Range Accuracy Less than ±2 %
Nonlinearity ±0.1% or less
Resolution Selectable 16-bit/24-bit
Analog-digital conversion method ΔΣ method with 24-bit, 128x oversampling
High pass filter 3rd-order Butterworth analog filter 10Hz/ 20Hz (within ±0.5dB)
Channel Phase Difference Band(20kHz or less): 2° or less (in same expansion unit)
 (20 V input range) : 3° or less (in different expansion unit)
Dynamic Range Band(80kHz or less): 3° or less
 97 dB @ 24 bit mode
 (1V input range in 20kHz band or less) 89 dB @ 16 bit mode

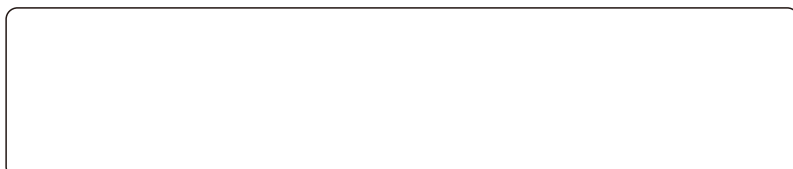
General
Front Panel Display 3.5" TFT LCD with Bar Meters
Recording Media SDHC flash-memory card(Class 10 recommended)
 RDX cartridge types (HDD and SSD)
Recording capacity SDHC : 4 GB – 32 GB
 RDX(HDD): 500 GB – 1 TB
 (SSD): 64 GB – 512 GB
IRIG/GPS (Optional) IRIG-B/GPS(NMEA)
Operating temperature/humidity 0 to 40 °C/10–80% (no condensation)
Storage temperature/humidity -20 ~ 60°C / 5 ~ 90%
Operating air pressure range 860–1060 hPa

Interface LAN 1000BASE-T connector x1
 DIGITAL CONTROL External control connector x1
 for ER-WXRC remote controller
 AQ-VU AQ-VU synchronization connector x1
 EXT TRIGGER IN Ext trigger signal input connector x1
 EXPANSION OUT expansion unit connector x1
 SYNC IN synchronized recording connector x1
 SYNC OUT synchronized recording connector x1
 UPS SIGNAL IN contact signal input connector x1
 FG frame grounding connector x1
Synchronization 2 units synchronized operation available (Max 128ch x 2=256ch)
Data File Format TAFFmat (TEAC Data Acquisition File Format)
Safety Standard UL , NRTL/C , CE
Vibration resistance MIL-STD-810E Figure514.4-1.2.3 (not including RDX HDD)
Dimensions WX-7000 : W340 x H 82 x D220 (mm) 4.1Kg
 (W x H x D) /weight AU-WXEPIO : W340 x H 40 x D220 (mm) 3.1Kg
 WX-7016 : W340 x H123 x D220 (mm) 7.4Kg
 WX-7032 : W340 x H164 x D220 (mm) 10.4Kg
 WX-7064 : W340 x H246 x D220 (mm) 17.1Kg
 WX-7096 : W360 x H396 x D370 (mm) 26.4Kg
 WX-7128 : W360 x H478 x D370 (mm) 33.9Kg
Power supply 11 – 30 V DC (powered from included AC adaptor)
 AC adaptors rated input voltage: 100–240 V
Power consumption WX-7016: 53W, WX-7032: 90W,
 WX-7064: 166W, WX-7096: 242W, WX-7128: 317W
Included accessories WX Navi (measured data waveform display software) x1
 Microphone x1 for voice memos
 Earphone x1 for voice memos
 CD-ROM (Contents: Owner's Manual, WX Navi software, WX Navi Operation Manual) x1
 Quick Start Guide x1 printed
 Expansion connection cables
 AC adaptors
Options AU-WXEPIO Expansion unit
 ER-WXRC Dedicated simple remote control
 AR-WXIRGPS IRIG-B timecode signal I/O card
 GPS data input card

TEAC AMERICA, INC.

1834 Gage Rd, Montebello, CA 90640
 Phone 323.726.0303 | Fax 323.727.7632
 Email datarecorder@teac.com
<http://datarecorder.jp/en/>

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 Features and specifications are subject to change without notice.
 Precaution : To ensure safe handling and operation, read the Instruction Manual before use.



WX-7016

The WX-7000 Series, a new Portable Instrumentation Data Recorder family of products, are designed to provide multi-channel high-bandwidth data recording solutions for testing and monitoring requirements in aerospace, defense, power generation, underwater research, rail transportation, automotive, heavy machinery, and acoustics/vibration-based industrial applications.

32, 64, 96 and 128 channel models are also available.



32ch model WX-7032 64ch model WX-7064 96ch model WX-7096 128ch model WX-7128

High-speed, Multi-channel and Long recording time in comparison to AIT tape data recorders.

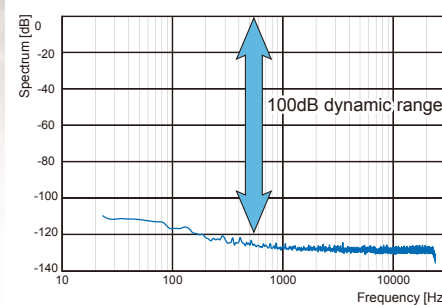
WX-7000 series from TEAC provide reliable data recording with protection from catastrophic data loss



128ch model
WX-7128

Wide Dynamic Range and High Resolution

Wide dynamic range and high resolution provide extended head-room input range to record transient phenomenon. 24 bit analog to digital conversion provides high-resolution measurement, avoiding low level data buried in noise.



Extended Recording Time

With the use of 500GB RDX media, WX-7000 records 36 times longer than AIT data recorder. There is no need to change media frequently to record long term test data.

TEDS (Transducer Electronic Data Sheet) support

TEDS function recognizes sensitivity information from transducers electronically, reducing set-up time and eliminating cabling errors.

Reliable Recording Media

WX-7000 unit and recording media (RDX, SDHC) are rugged and reliable.

SDHC card has no moving part and is shockproof media. RDX is a disk-based (HDD/SSD) storage system with removable cartridges which offers rugged, reliable and convenient data storage. RDX cartridge is shockproof which against 1m (39.4") drop to tile over concrete floor.



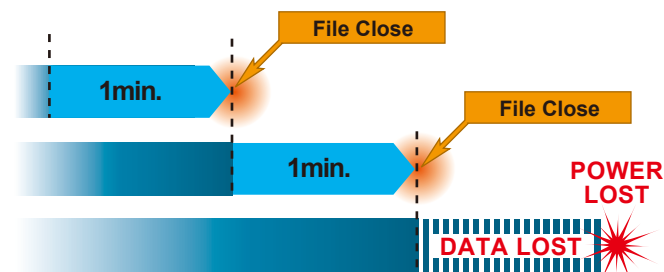
User-friendly, Intuitive Operation

3.5 inch LCD is provided on front panel, for user-friendly operation. Recorder settings are shown on the display. It's easy to monitor and change main parameters on home screen, with easy to access additional set-up menu pages.



Fail-safe Recording

WX-7000 closes the data file after every one minute while recording. Even if an unexpected or mistaken power outage happens during recording, all recorded data from one minute before power loss is saved and is available for review and replay.



WX Navi Control and Viewing Software for WX-7000

The VR-24 is a Video NV recorder which can record 2ch HD Video and Analog signals along with CAN, GPS and Pulse data in perfect sync. WX-7000 series are able to synchronize with VR-24. Having a way to watch synchronize video and analog signals would greatly help you analyze the phenomena you recorded.

*When synchronizing WX-7000 and VR-24, VR-24 is assigned to the slave unit.



Video NV recorder VR-24

Software Support

(Commercial product)

OPTION

WX Navi Control and Viewing Software for WX-7000

3.5 inch LCD is provided on front panel, for user-friendly operation. Recorder settings are shown on the display. It's easy to monitor and change main parameters on home screen, with easy to access additional set-up menu pages.



Control API

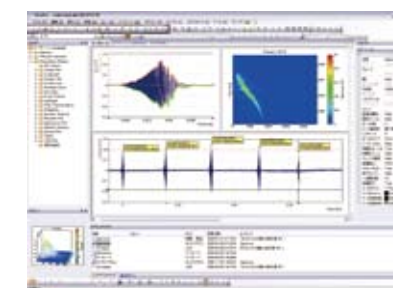
Control API is provided as a Windows DLL(Dynamic-Link Library) which can be linked from an upper program. Control, Settings, Real-time Transferring Data, Downloading Recorded Data File are available using this Control API. Data analysis software developer, system integrator can use this Control API in order to add these functions to their existing system.

TAFFmat (TEAC data Acquisition File Format) Data File

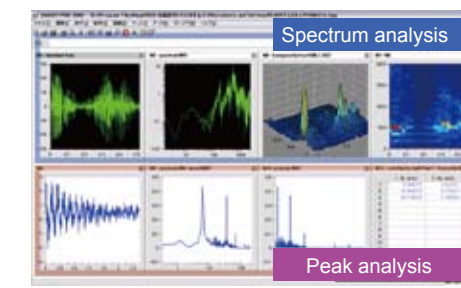
TAFFmat is widely supported by major data analysis software. Recorded data file by WX-7000 can be analyzed using data analysis software which is currently used.

Category	Software	Note
General	DADiSP	
	FlexPro	
	DIAdem	
	FAMOS	
	Matlab	Script file can be provided
NVH	LMS Test.Lab	
	B&K PULSE	16 bit only
Turbine Test	APEX Turbine DS	

General analysis software (Commercial product)



FlexPro9
Developed by Weisang GmbH



DADiSP 6.5
Developed by DSP Development Corporation



DS
Developed by APEX Turbine