

Lineup *The number of channels varies depending on the amplifier configuration.



64ch model 48ch model 32ch model 16ch model

External dimensions (WxHxD)	approx. 300 x 197 x 200mm	approx. 300 x 153 x 200mm	approx. 300 x 109 x 200mm	approx. 300 x 65 x 200mm
Weight*	approx. 10kg	approx. 7.7kg	approx. 5.4kg	approx. 3.1kg
Power consumption	AR-LXPA1000 (Analog) x 4 approx. 81W AR-LXST1000 (Strain) x 4 approx. 133W	approx. 64W approx. 103W	approx. 47W approx. 73W	approx. 30W approx. 43W

* Not including AC adapters, media and optional boards

Specifications

Product configuration	Main unit LX-1000	Up to 4 amplifiers can be incorporated.
	Expansion unit AU-LX1000EPIO	Up to 4 amplifiers can be incorporated.
Power supply	AC100V – 240V (from included AC adaptor), DC 8V – 36V	
Maximum number of channels	Analog recording: up to 64 ch / pulse recording: 2 ch *A cooling fan is necessary if even one AR-LXST1000 is installed.	
Cooling	No external cooling required (Fanless: up to 32 ch)	
Sampling frequencies	102.4kHz series	102.4k / 51.2k / 25.6k / 12.8k / 5.12k / 2.56k / 1.28kHz
	100kHz series	100k / 50k / 20k / 10k / 5k / 1kHz
	96kHz series	96k / 48k / 24k / 12k / 6k / 3k / 1.5kHz
	65.54kHz series	65.536k / 32.768k / 16.384k / 8.192k / 4.096k / 2.048k / 1.024kHz
	Low speed sampling	500 / 200 / 100 / 50 / 10 / 5 / 1Hz
Quantization bit depth	16bit / 24bit	
Interface for PC	Gigabit Ethernet (1000BASE-T) x 1 port	
Recording media	SDHC / SDXC card (8GB – 128GB, CLASS 10 or more) / PC direct recordable	
Maximum recording rate	3.2 Mbyte/s	40kHz band (102.4kHz sampling) x 16-bit x 16ch
Synchronized operation	LX-1000 Synchronization	Up to 4 units
	VR-24 synchronization	1 unit
Pulse input (standard equipment)	Number of input channels	2
	Input connector type	BNC
	Input format	Unbalanced
	Input impedance	100kΩ
	Input voltage	±50V maximum (threshold ±20V)
	Input frequency	450kHz maximum
	Threshold	±0.5V / ±1V / ±2.5V / ±5V / ±10V / ±20V (switchable)
	Division ratio setting	1 – 255
Moving average	1, 2, 4, 8, 16	
	Number of input channels	1ch
GPS input (standard equipment)	Input connectors	DX10A-20S (50)
	Recommended GPS module	GARMIN GPS18x-5Hz
	Sampling frequency	8kHz
Voice memo input and output	Quantization bit depth	8 bit
	File format	WAV
	Operating temperature / humidity range	0 to 40°C / 10 to 80% (no condensation)
Operating conditions	Storage temperature / humidity range	-20 to 60°C / 5 to 90% (no condensation)
	Operating air pressure range	860 – 1060hPa
	Vibration resistance	MIL-STD-810E Figure 514.4-1, 2, 3

Accessories

- CD-ROM × 1
Contents: Instructions for Use, LXX Navi software*, LXX Navi Operation Manual
- AC adapter × 1
LX-1000 only
System with LX-1000 and one AU-LX1000EPIO unit ×1
System with LX-1000 and two AU-LX1000EPIO units ×2
System with LX-1000 and three AU-LX1000EPIO units ×2
- AC adapter power cords same as number of AC adapters
- Microphone for voice memos ×1
- Earphone ×1
- Front handle (TZ-LXFH1000) ×1

Options

- BU-LX1000 Battery Box
- ER-LXRC1000 Remote control unit
- TZ-LXFAN1000 Cooling fan unit
- NP-7LS Battery pack
- JL-2PLUS Battery Charger
- LXGPS18X (5Hz) GPS receiver
- CS-LX1016 Carrying Case (for up to 16ch)
- CS-LX1032 Carrying Case (for up to 32ch)
- TZ-LXVMK series Vehicle Mount Adapter
- CL-DRDC DC power cable



BU-LX1000 Mounting image with 16CH model

* Batteries and battery charger are sold separately.
Continuous operation time on battery unit: approx. 7 hours

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TEAC EUROPE GmbH.

Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany
Tel.: +49-(0)611-7158-651 +49-(0)611-7158-392
e-mail: info@teac.eu URL: https://teac.eu

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TEAC

DATA RECORDER LX-1000



32ch model



64ch model



48ch model



16ch model

In Pursuit of Data Recording Further challenges to recording, and evolution

PA Amplifier Module



ST Amplifier Module



CAN Module



AO Amplifier Module





LX-1000 comes with fulfilling functions and has field use specifications.

Basic design

Compact and lightweight design with excellent portability

Flexible power supply specification from DV 8V to 36V

Options

Various options for more convenient use



Standard equipment

Pulse Input

GPS Input
GARMIN GPS18x-5Hz (Option)

Input / Output amplifier modules

Available in 4 selectable amplifier modules. Amplifier modules can be replaced or expanded freely; which enables you to choose the configuration that suits your needs. Also, you can narrow down the configuration to the minimum necessary, share with other departments, and expand the range of utilization.

Analog Analog signal input amplifier **AR-LXPA1000**

Number of input channels	4 ch/module DC/AC/IEPE Selectable
Input connector	BNC (Z=50Ω Type)
Input format	Unbalanced
Input impedance	1MΩ
Input range	±0.1/0.2/0.5/1/2/5/10/50V
Analog-digital conversion method	ΔΣ conversion method
HPF	OFF / 5Hz (-18dB/oct Butterworth filter)
Weighting	FLAT, A, C (IEC TYPE 1 compliant)
Signal quantization bit depth	16/24-bit
Input renage precision	±2%
Dynamic range	125dB or more (24-bit, 5V input range, FFT-based)
IEPE sensor power supply	DC 24V/4mA
IEPE sensor disconnection detection	Detection function included for each channel
TEDS	Supports TEDS Ver. 1.0

Strain strain input amplifier **AR-LXST1000**^{*1}

Number of input ports	4
Input signal type	Strain*/DC
Input connector	7-pin Lemo, Ø10 (EGGOB type)
Input format	Unbalanced, DC coupled
Input impedance	1MΩ
Absolute maximum input voltage	±25V
Signal quantization bit depth	16/24-bit
Linearity	±0.1%
Analog-digital conversion method	ΔΣ conversion method
LPF cutoff frequencies [Hz]	10/30/100/300/1k/3k/10k/30k/Pass (-48dB/oct Butterworth response)

Strain mode	
Input range	±500/1000/2000/5000/10000/20000/50000/100000 μst
Gauge ratio	2
Bridge voltage	2/10V (DC bridge format)
Bridge connection	Full bridge
Balance adjustment method	Electronic automatic balancing
Balance adjustment range	±10000 μst (when 2V bridge voltage)
DC mode	
Input range	±1/2/5/10V
Dynamic range	110dB or more
Crosstalk	-90dB or lower

^{*1} A cooling fan is necessary if even one AR-LXST1000 is installed.
^{*2} A bridge box (sold separately) is required when measuring with a strain gauge.

CAN CAN module **AR-LXCAN1000**

Supporting the next generation car network, CAN FD.

Number of input ports	2
Input connector	9-pin D-sub
Supported protocol	ISO 11898-1:2015 2.0A (11-bit ID) / 2.0B (29-bit ID)
Baud rate	125 / 200 / 250 / 500 / 1000 / 1250 / 2000 / 2500 / 4000 / 5000 kbps
Recording mode	Full acquisition / Signal acquisition
Bus mode	Normal / Listen Only
ID filtering	32/port (in full acquisition)
Signal registrations	32/port (in signal acquisition)
Bus mode	Normal / Listen Only
Thinning-out mode	10 / 20 / 50 / 100 / 200 / 500 ms, 1 / 2 / 5 s
Termination resistance	Switchable
Isolation	Isolation between ports
Configuration restrictions	Up to 4 modules for CAN

Analog Analog signal output amplifier **AR-LXAO1000**

Number of output channels	4
Output connector	BNC (Z=50Ω Type)
Output format	Unbalanced
Output impedance	50Ω
Output range	±1 to 5V (adjustable in 0.1V steps)
Maximum output current	10mA
Signal quantization bit depth	16/24-bit
Extended range	±127% (of rated range)
Digital-analog conversion method	ΔΣ conversion method
Phase difference between output channels	1 degree or less
Output range precision	±1% (5V output range)
S/N ratio	100dB or more (within band, 5V output range)

Dynamic range improvement

The realization of 120 dB (FFT based) wide dynamic range enables more accurate recording and reproduction even with dynamic signals with large fluctuations.

Synchronization with video

Supporting synchronization with the TEAC Video NV Recorder VR-24, which makes it easy to completely synchronize video and data. Scheduled to support video synchronization using a PC.

Multi-channel support

Support for up to 64ch in one unit. Up to 4 units (up to 256ch) can be synchronized. Also available to verify complex events.

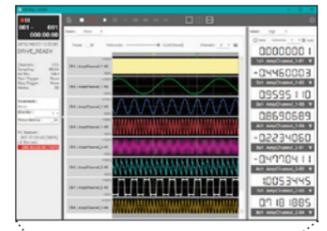
Diversification of amplifier modules

Lineup of various amplifier modules, such as analog input amplifier for TEDS compatible voltage output sensors, analog output amplifier for input signal voltage conversion, CAN data acquisition module, and amplifier for strain gauge converter.

General-purpose media adoption realizes improved media availability and increased capacity
Highly versatile SD memory card adopted for recording media (SDXC: up to 128GB)
Easy to use due to significant capacity increase compared with conventional models.

Fanless (up to 32ch configuration)
Less limited equipment arrangement. Realization of clear sound and vibration measurement without worrying about the effects of fans.

Flexibility and simplification of the channel increases and decreases
Channel configuration of 1 amplifier: 4ch (2 ports for CAN)
Easy-to-understand structure assuming replacement. Necessary amplifier can be set instantly according to the measurement object.



PC control enhancement

Full control from a PC and direct recording to a PC are possible. The control app has also been updated to be easier to use and improve the convenience of using data.



Well-designed Interface

The remote control unit employs a jog-dial and graphical screen for easy operation.