



Visual LOG[®]

Multi-Recorder Measurement Data Processing Software

TMR-7630

Frequency processing version
Video Capture Support Version

TMR-7630-H
TMR-7630-M

Instrument setting

Measurement Condition Setting

Supported measuring instruments TMR-300, 200 series

Control panel

Data graph

Real-time monitor graph

Measurement Software **Visual LOG[®]**

- Connect four multi-recorder control units for a maximum of 320 channels
- Various styles of graph display including waveform, numeric, X-Y, and other monitor graphs, history graphs, spectrum graphs, and frequency graphs are also added.
- Auto-clear card when CF card capacity is insufficient and continue automatic measurement
- Automatic data recording by interval, data trigger, external trigger, free-run, data comparator, program, and other measurements
- Data-triggered, free-run or programmed measurements can be taken offline

This software performs multi-channel dynamic measurement and data processing using the TMR-300/200 series multi-recorder system. Real-time waveform display during sampling allows measurement while checking dynamic waveforms. Centralized management of measurement conditions, settings, and data allows you to check settings and measurement data on the same startup screen. Data can be converted to CSV format or DADiSP compatible format. In addition, the created graphs can be saved in BMP, EMF, and PNG formats, allowing not only the creation of reports but also loading and reprocessing with commercially available software.

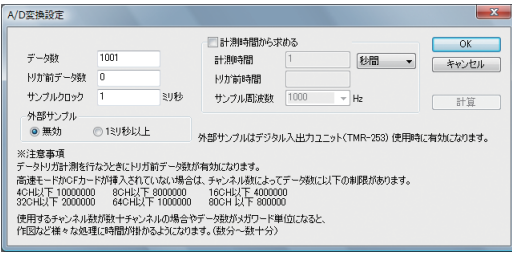
Compatible with the optional frequency processing library (TMR-311-01/TMR-211-01) for TMR-311/211, enabling real-time frequency processing. The TMR-7630-H, which performs post-processing frequency analysis of measured dynamic waveforms, and the TMR-7630-M, which is a video capture-compatible version that saves video from DirectX-compatible cameras in conjunction with measurement and synchronizes playback of recorded data and video.

*Visual LOG is a registered trademark of Tokyo Measuring Instruments Laboratory Co., Ltd.

*DADiSP is a registered trademark of DSP Development Corporation.

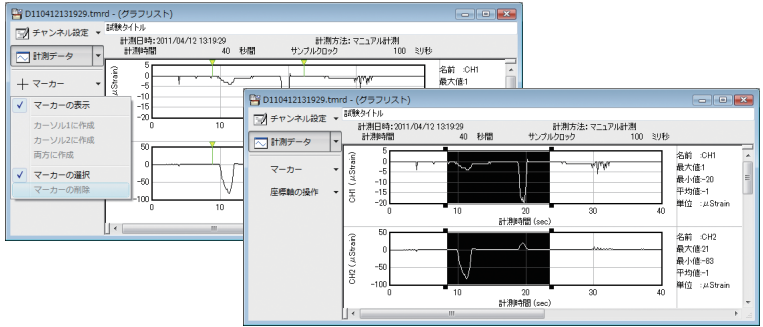
Setup/Processing Screen

Instrument setting

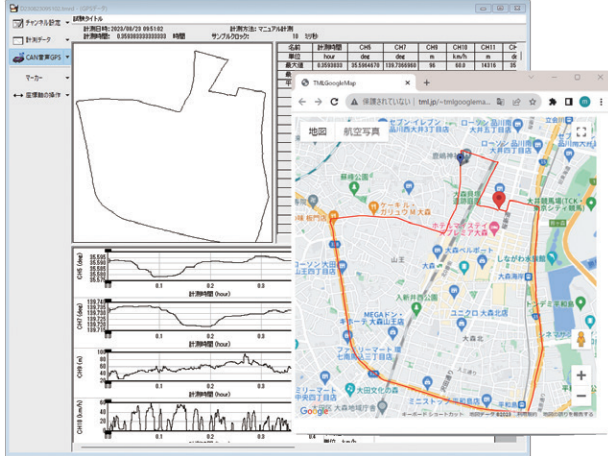


Graph list

(data can be extracted and searched for maximum and minimum values)

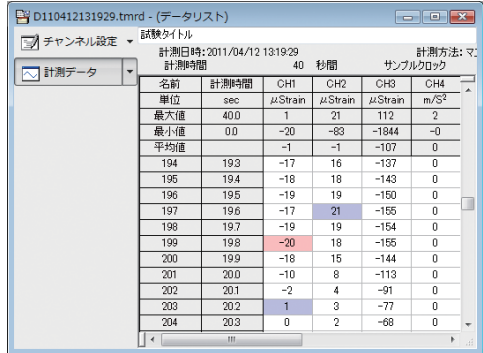


GPS map (when using GPS unit)



Data list

(maximum and minimum values can be searched)



TMR-7630 Operating Environment

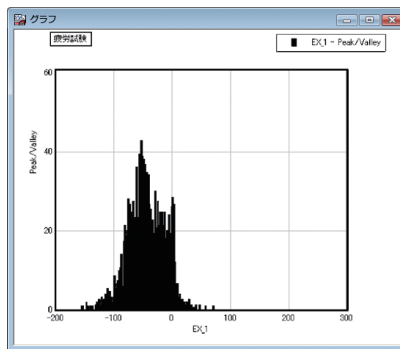
OS	Microsoft Windows 7(SP1)/8.1/10/11
PC	Specs recommended by the above OS or higher
Interface	Models with CD drive, USB port, and LAN port if LAN interface is used
LAN	LAN 100BASE-TX, wireless LAN (TMR-311 only)
USB	USB 2.0
Protection key	USB dongle

Specification

Supported measuring instruments	TMR-311, TMR-211
Number of measuring instruments that can be used simultaneously	Control unit TMR-311/211 up to 4 units Up to 10 units per I/O unit that can be connected to the control unit (320 points total)
Maximum number of calculated data items	1000 max
Setting up a measurement project	The measurement project allows centralized management of measurement settings and measurement results. Manage instrument settings, A/D settings, channel settings, automatic measurement settings, etc.
Measuring device setting	Selecting the measuring instrument to be used and setting up the interface
A/D setting	A/D conversion settings by number of data and sample clock
Channel setting	
Input channels	SET, name, input mode, input range, low pass filter, high pass filter, balance, reference contact, coefficient, rated output, capacitance, shift, units, format, alarm, optional data
Output channel	Input channel, output voltage, input value, rated output, calibration value
Frequency NO*	Input channels, analysis method, full scale, hysteresis, sampling/cross level, slices *To perform frequency processing, the instrument must be equipped with the frequency processing function (option TMR-311-01/TMR-211-01).
Expansion channel	Name, function, unit, format, alarm, option
Automatic measurement setting	
Data Trigger Measurement	Trigger level (physical quantity), trigger mode (relative/upper/lower)
Program measurement	Measurement start date/time, measurement time, pause time, number of measurements
Interval measurement	Measurement start date and time, measurement interval, conditions
Data Comparator Measurement	Name (CH/NO), amount of change, conditions

Frequency graph

(when using optional frequency processing library)



Measurement data	Data list, graph list
Record	Measurement history, maximum-minimum average, frequency history
Save and load	Save and load measurement projects
Printing	Printing of measurement projects
Measurement	
Balance	Sensor zero adjustment (any channel selectable)
Measurement mode setting	Normal, monitor, free-run, data trigger, interval, data comparator, program measurement
Offline Measurement	Free-run measurement, data-triggered measurement, and off-line measurement by exiting the software after executing programmed measurement.
Storage of measurement data	Measurement data (waveform data) is automatically recorded in the same location as the saved measurement project file, in a folder for data storage with _DATA added to the measurement project file name.
Data processing	
Making a table or chart	Spreadsheet display of measured data
Plotting - Charts	Monitor graphs, data graphs, frequency graphs, history graphs, spectral graphs, scale change and auto scale functions
Data File Processing	
Editing Data	Edit arbitrarily
Data extraction	Cut out only the necessary portion with the cursor
Data thinning	Thinning at any step
Data conversion	Convert to text files (CSV, DADiSP compatible text)
Printing	Print results in tabular or graphical list

Option [Video Capture Support Version TMR-7630-M]

Video can be recorded using a video capture device connected to a PC in conjunction with measurements, and playback can be performed in conjunction with measurement data.

Data can be synchronized with the measurement status for structural tests, driving tests, behavior during operation, etc.

Video Recording History

The screenshot displays the Visual LOG TMR-7630-M software interface. It features a main window with a '計測プロジェクト2.tmrp' (Measurement Project 2) and a 'グラフィック' (Graphics) section. The 'グラフィック' section shows a 'モニタグラフ' (Monitor Graph) with two channels, CH1 and CH2, plotted against time (sec). The graph shows a sharp peak around 3 seconds. Below the graph is a 'ビデオ記録履歴' (Video Recording History) table with columns for 'ファイル名' (File Name), '記録日時' (Recording Date/Time), and '録画時間' (Recording Time). The table lists 8 recorded video files. To the right, there is a '計測/パネル' (Measurement/Panel) window showing a live video feed of a car's interior. The interface also includes various settings for channels, units, and measurement parameters.

TMR-7630-M Operating Environment

OS	Microsoft Windows 7(SP1)/8.1/10/11
PC	Specs recommended by the above OS or higher Models with CD drive, USB port, and LAN port if LAN interface is used
Interface	
LAN	LAN 100BASE-TX, wireless LAN (TMR-311 only)
USB	Number of USB2.0 ports: Number of measuring instruments used + protection key 1 for measuring instrument, but not required when using LAN 1 for camera, but not required when using an interface other than USB
HDD capacity	HDD for storing data is recommended to have 100 GB or more free space At least 4 GB of free space is recommended for the HDD containing the OS
Supported Cameras	UVC-enabled cameras and capture devices
Number of cameras	1 unit

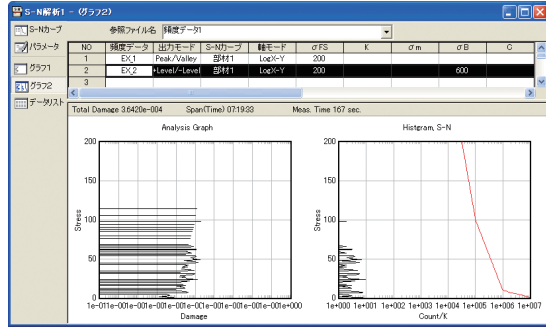
TMR-7630-M Specifications

Video capturing	Import videos to be linked with measurements to a PC
Video file format	AVI file
Recipient	"VIDEO" folder directly under the measurement project folder
Video Capture Window	Recording Start/Stop/Automatic Recording
Input Device Selection	If multiple cameras are connected, the camera is selected. However, only one camera can be used.
Video Recording History	Manages the recorded video recording history (video playback/rename video files).
Playback Window	Select and play any video
Linkage with measurement data	
Sequential video files	Multiple videos can be linked with a single measurement data. It is also possible to link multiple measurement data to a single video. However, multiple videos cannot be played back simultaneously. Only videos that have been imported by this software can be linked.
Synchronization indication	Linkage with measurement data is performed on the Data List screen or Graph List screen of the measurement data file. The video corresponding to the measurement date and time of the measurement data with the cursor displayed is displayed.
Playback method	Start playback, stop playback, playback feed speed, automatic synchronization, update synchronization display
Playback window	The video corresponding to the time the cursor is displayed on the Data List or Graph List screen is displayed in the playback window.
Synchronous Offset	For each measurement data, the input value is added to the recorded date and time of all videos. The unit is in seconds, but you can also input less than a second. The input range is up to ± 15 digits of the real number.

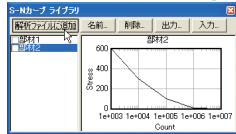
Option [Frequency processing version TMR-7630-H]

The frequency process and S-N analysis of expanded channels for later frequency analysis of the measured dynamic waveform are possible.

S-N analysis



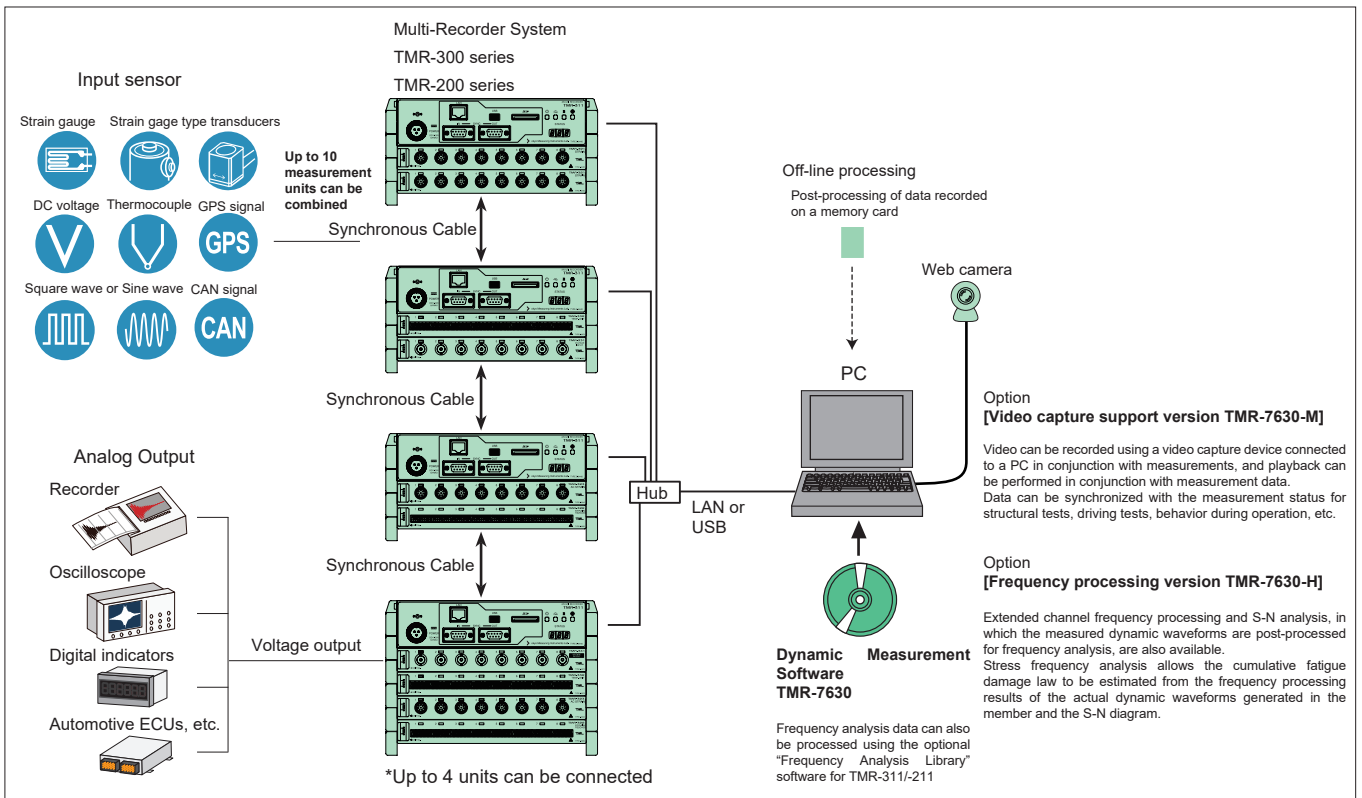
S-N Curve Library



TMR-7630-H Specifications

Frequency Analysis Method	Maximum and minimum value method (PEAK/V) Maximum and minimum value method (MAX/MIN) Amplitude Method (AMP) Time method (TIME) Level Crossing Method (LEVEL) Rain Flow Method (RAIN)
Extended frequency setting	For each extended frequency NO, frequency analysis is performed by selecting the channel for frequency measurement from input channels and extended channels.
Number of setups	Up to 80 channels
Setting item	Channel selection, analysis method, full scale, hysteresis, cross level, sampling time, slicing
Frequency analysis	Automatic frequency analysis when creating measurement data files Perform frequency analysis from measurement data files Consecutive frequency analysis from measurement history
Frequency data file	Text conversion, HR7916 CSV format output
Fatigue life estimation (S-N analysis)	Estimates fatigue life from frequency data files.
Calculation of Cumulative Fatigue Damage Degree by Analytical Method	The "Miner's Rule" and "Modified Goodman's Method" are used to calculate cumulative fatigue damage.
Computable Analysis Methods	Rain Flow Method (RAIN) Level Crossing Method (LEVEL) Amplitude Method (AMP) Maximum and minimum value method (MAX/MIN) Maximum and minimum value method (PEAK/V)

Measurement Systems



Approval Certificate ISO9001
Design and manufacture of strain gauges, strain measuring equipment and transducers

The contents of this catalog are subject to change without prior notice.
The contents of this catalog are as of January 2025. TML Pam E0933A.



8-2, Minami-ohi 6-chome, Shinagawa-ku, Tokyo 140-8560, JAPAN
TEL: +81-3-3763-5614 FAX: +81-3-3763-6128

