

QUAKELOGIC

BI-AXIAL SHAKE TABLE

QL-BIAXIAL-STANDARD

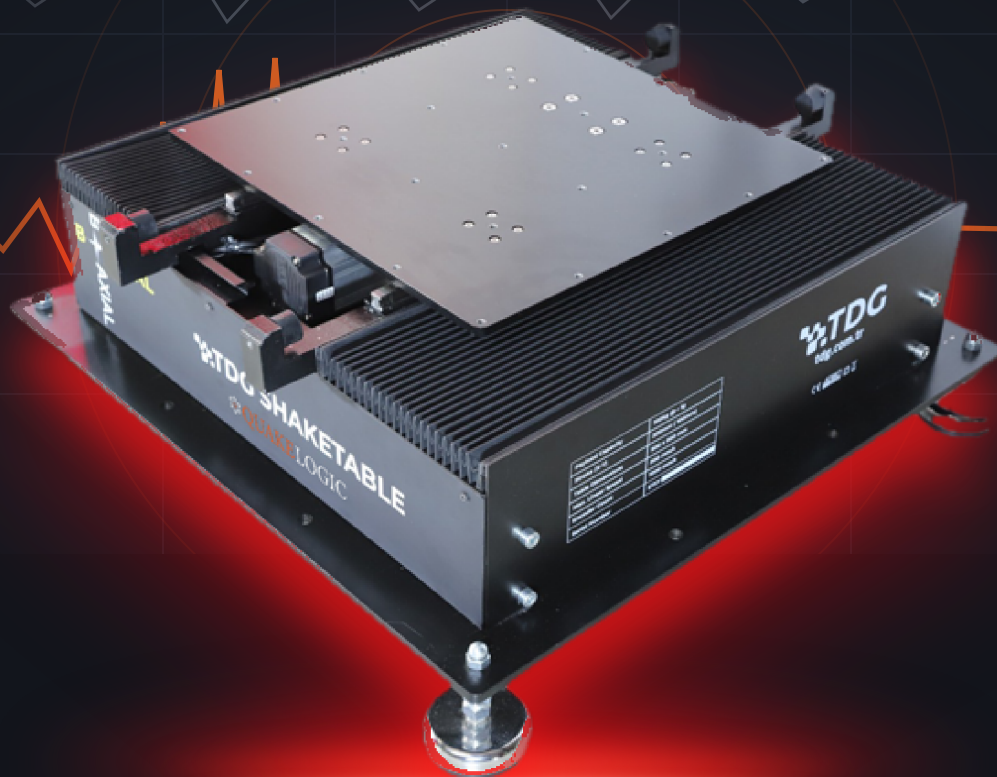


MADE IN USA

GLOBALLY SOURCED MATERIALS

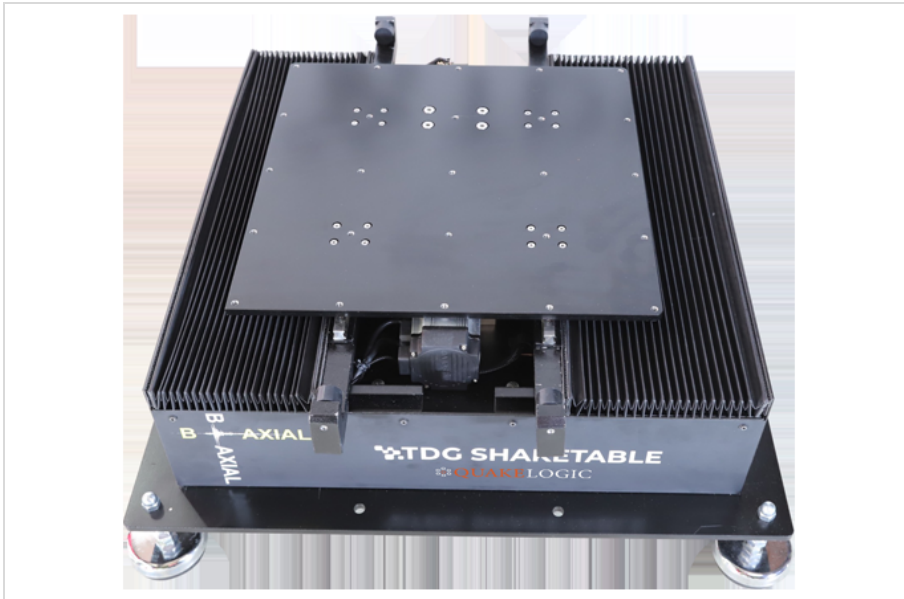
QL-BIAXIAL STANDARD · BI-AXIAL EARTHQUAKE SIMULATOR

CONTROLLER · SERVO-DRIVER · EASYTEST SOFTWARE INCLUDED · IP-BASED REMOTE CONTROL



QL-BIAXIAL STANDARD

BI-AXIAL SHAKE TABLE · CONTROLLER & EASYTEST SOFTWARE INCLUDED



PORTABLE IP-BASED BI-AXIAL EARTHQUAKE SIMULATOR

The QL-BIAXIAL STANDARD is a high-precision, portable desktop bi-axial shake table built as an earthquake simulator for university, private, and government research laboratories. Its fully integrated design bundles the controller, servo-driver, and EASYTEST software into a compact, IP-based platform. Light enough for in-class demonstrations yet precise enough for research, it delivers a large payload area, high peak acceleration, and remote-control operation without costly third-party software.

- IP-based architecture enables remote start, stop, and monitoring of tests from outside the lab, freeing researchers from constant on-site supervision.
- Large 750x750 mm payload area and 100 kg capacity at 1g accommodate a wide variety of test specimens for research and teaching.
- Two embedded MEMS accelerometers verify that actual table output matches input waveforms, giving direct confidence in test fidelity.
- Bundled EASYTEST control software ships free of charge, eliminating expensive MATLAB toolbox licensing while offering advanced simulation and post-processing.

STANDARD FEATURES »

- Integrated Controller
- Integrated Servo-Driver
- Servo Motor
- Precision Linear Guides
- Integrated Limit Switches
- Automatic Home Centering
- Two MEMS Accelerometers
- IP-Based Remote Control
- EASYTEST Software Included
- Dust Protection Cover
- Rubber Damping Strips
- Detachable Carrying Handle
- L-Bracket Mounting
- Adjustable Mount Accessories
- Mounting-Hole Grid
- Adjustable Leveling Feet
- Full Technical Support
- Made in USA

KEY FEATURES

- Fully integrated design houses the controller and servo-driver in one enclosure, simplifying deployment and eliminating external control-cabinet clutter and cabling.
- Super low-friction precision linear guideways deliver smooth, repeatable bi-axial motion with minimal noise, supporting accurate reproduction of recorded earthquake records.
- Servo motor drive produces high peak acceleration and a clean waveform, reproducing real seismic time histories with high fidelity.

Two MEMS accelerometers mounted beneath the moving plate

- confirm input-versus-output match, letting users validate every test record on the spot.

Integrated limit switches and automatic centering / home

- positioning protect the mechanism and return the table to a known reference before each run.

IP-based connectivity allows full remote control and monitoring, so

- tests can be commanded and observed from any networked workstation.

Dust-protected construction with no open mechanical parts and

- rubber damping strips ensures stable, low-vibration operation in classroom and lab environments.

EASYTEST software generates earthquake, sine, sweep, and other

- waveforms with real-time FFT and SRS display for immediate analysis.

Detachable carrying handle, L-bracket mounting, and adjustable

- mounting accessories make the table easy to transport and install for portable demonstrations.

PRODUCT FEATURES

Drive & Motion

Servo motor drive · Super low-friction precision linear guides · Automatic centering / home positioning

Payload & Envelope

750x750 mm payload area · ± 100 mm maximum stroke · 100 kg @ 1g payload capacity

Performance

20 Hz maximum operating frequency · High peak acceleration capacity · High total mass capacity, low noise

Control & Connectivity

Integrated controller and servo-driver · IP-based remote control · EASYTEST software included free

Instrumentation

Two MEMS accelerometers under mount plate · Input-vs-output waveform verification · DAQ channel calibration and filtering

Safety & Protection

Integrated limit switches · Dust protection, no open parts · Rubber strips for damping and stabilization

Mechanical & Portability

Compact economic design · Detachable carrying handle · Mounting-hole grid on table surface

For more information about the features, specifications, and available configurations of the QL-BIAXIAL STANDARD, please contact QuakeLogic.

MACHINE CONFIGURATION

COMPONENT	CONFIGURATION
Configuration	Portable bi-axial (dual-axis) shake table
Drive System	Servo motor
Guideways	Super low-friction precision linear guides
Control System	Integrated controller with servo-driver
Control Software	EASYTEST (included, no charge)
Connectivity	IP-based, remote control capable
Feedback Sensors	Two MEMS accelerometers under mount plate
Safety	Integrated limit switches
Homing	Automatic centering / home positioning
Damping	Rubber strips for stabilization
Enclosure	Dust-protected, no open mechanical parts
Mounting	L-brackets with adjustable positioning

CAPACITY

SPECIFICATION	VALUE
Payload Area	29.5 x 29.5 in (750 x 750 mm)
Maximum Stroke	±3.9 in (±100 mm)
Maximum Payload	220 lb (100 kg) @ 1g
Maximum Operating Frequency	20 Hz
Number of Axes	2 (bi-axial)
Peak Acceleration	1g at full rated payload
Feedback Channels	2 MEMS accelerometers
Time History Import	Unlimited file size, continuous
Remote Operation	IP-based, full remote control

OPTIONAL FEATURES & ACCESSORIES

EXTENDED WARRANTY

Extendable warranty coverage lengthens the standard support period for long-term laboratory reliability and reduced ownership risk.

ANTI-DUST PROTECTION KIT

Additional dust-protection accessories seal the mechanism further for demanding or particulate-heavy laboratory environments.

ADJUSTABLE MOUNTING SET

Detachable mounting accessories with adjustable positioning secure varied specimen geometries to the table quickly and repeatably.

EASYTEST TRAINING

Guided training on the EASYTEST control software covers waveform generation, calibration, and post-processing workflows for lab staff.

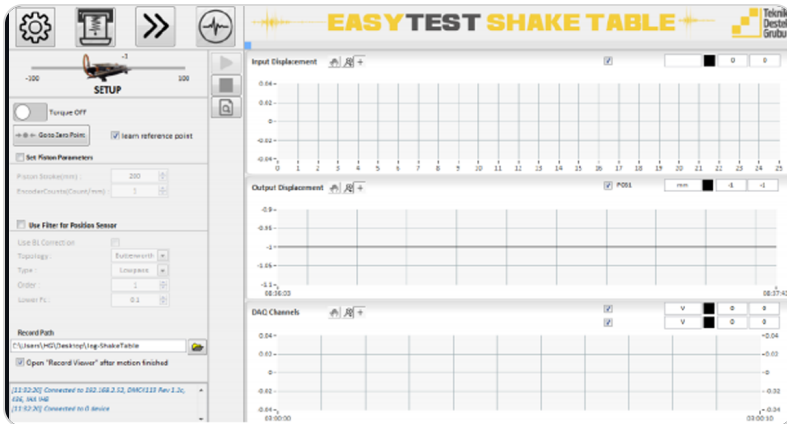
TECHNICAL SPECIFICATIONS

SPECIFICATION	DESCRIPTION
Product Type	Portable bi-axial shake table / earthquake simulator
Axes of Motion	2 (bi-axial)
Payload Area	29.5 x 29.5 in (750 x 750 mm)
Maximum Stroke	±3.9 in (±100 mm)
Maximum Payload	220 lb (100 kg) @ 1g
Maximum Operating Frequency	20 Hz
Peak Acceleration	1g at rated payload
Drive Type	Servo motor
Linear Guides	Super low-friction precision guideways
Controller	Integrated controller and servo-driver
Connectivity	IP-based (Ethernet), remote-control capable
Feedback Instrumentation	2 MEMS accelerometers under mount plate
Homing	Automatic centering / home positioning
Safety Devices	Integrated limit switches
Damping	Rubber strips for stabilization
Enclosure	Dust-protected, no open mechanical parts

SPECIFICATION	DESCRIPTION
Mounting	L-brackets, adjustable positioning
Table Surface	Mounting-hole grid for specimen fixing
Portability	Detachable carrying handle, light weight
Leveling	Adjustable leveling feet
Control Software	EASYTEST (included, no charge)
Waveform Types	Earthquake, sine, triangle, sawtooth, square, sine sweep
Time History Import	ASCII files, unlimited size, continuous operation
Signal Conditioning	Filtering and scaling of input data
Profiles	User-defined, saved/loaded as projects
Real-Time Display	Output displacement/acceleration FFT and SRS
DAQ Calibration	Easy per-channel calibration
DAQ Filtering	Digital filter options per channel
Post Processing	Viewer panel with graph palette
Graph Tools	Zoom, cursor, resizable plots
Technical Support	Full support from US HQ
Country of Origin	Made in USA

EASYTEST CONTROL SOFTWARE (INCLUDED, NO CHARGE)

Every QL-BIAXIAL STANDARD ships with the full EASYTEST control suite at no charge. One application covers table setup and safety, waveform generation, earthquake record simulation, live input-versus-output verification, and post-test review – over an IP connection from any networked workstation.

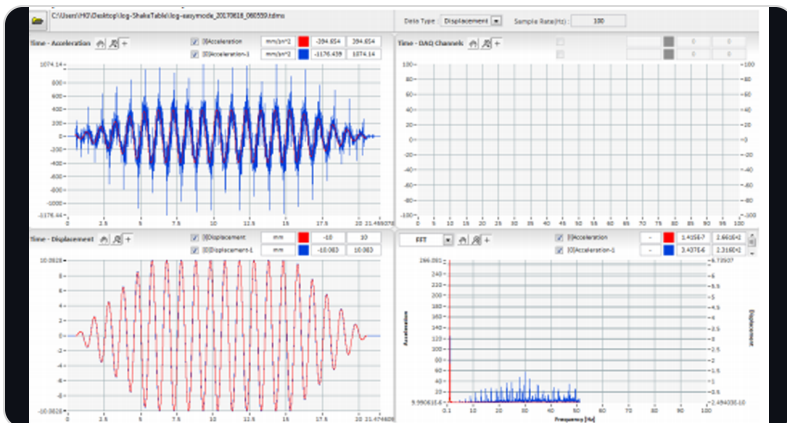
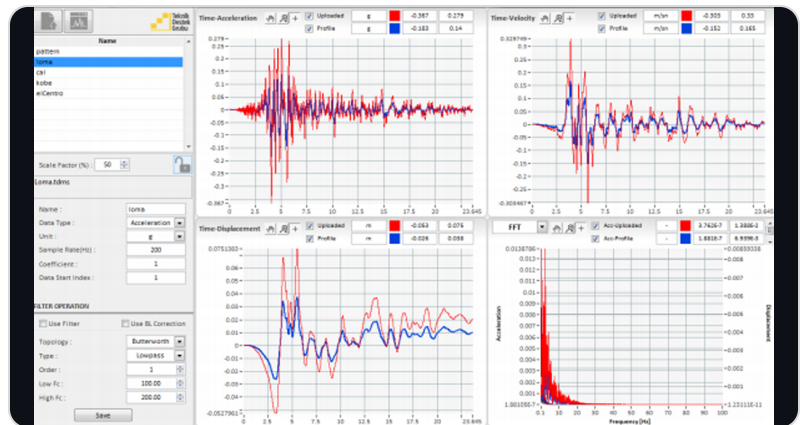


INTEGRATED TEST CONTROL

Table setup, piston parameters, position-sensor filtering, and record paths in one panel, with live input displacement, output displacement, and DAQ channel traces during the run – all commanded remotely over the IP connection.

EARTHQUAKE RECORD SIMULATION

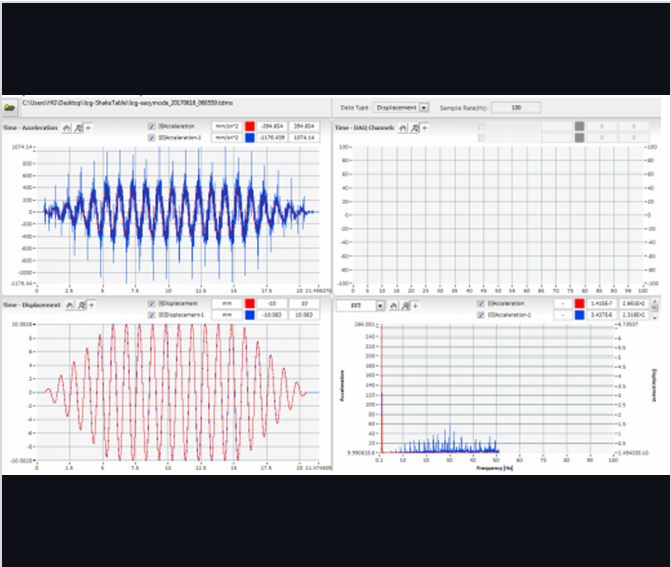
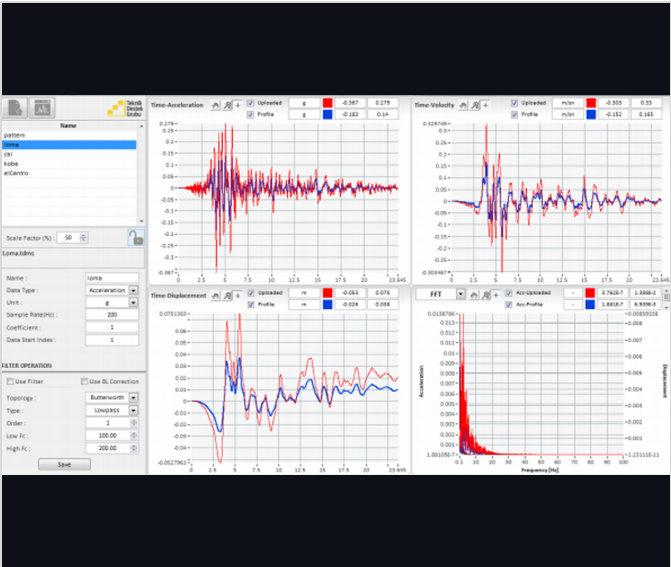
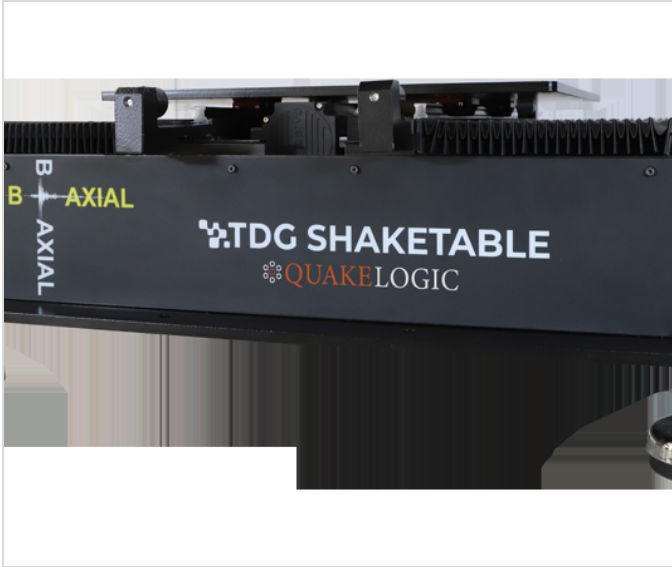
Import recorded seismic time histories or generate sine, sweep, triangle, sawtooth, and square waveforms; scale, filter, and condition the input; then compare uploaded versus profile motion in acceleration, velocity, displacement, and FFT views.



RECORD VIEWER & POST-PROCESSING

Every run is logged and opens in the viewer panel for post-test analysis: acceleration and displacement traces, per-channel FFT, and zoom, cursor, and resizable graph tools to validate input-versus-output fidelity on the spot.

PRODUCT GALLERY — PRECISION HARDWARE & EASYTEST SOFTWARE



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About QuakeLogic:

QuakeLogic Inc. is a California-based engineering and technology company providing innovative, reliable, high-quality solutions to customers worldwide.

Our Commitment

We are committed to quality, innovation, and customer satisfaction — building lasting partnerships through reliable solutions and dependable support.

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