

BACKHOE LOADER SIMULATOR



3DOF HEAVY EQUIPMENT SIMULATOR

SANLAB combines deep expertise in robotics and simulation with a customer-focused approach to deliver industry-leading heavy equipment simulators. These systems provide operators with realistic driving, precise machine control, and safe operation experiences while ensuring exceptional precision, durability, and high performance.

3DOF Backhoe Loader Simulator is specifically engineered for high-performance construction equipment simulation and training applications.

APPLICATIONS

- Operator skill development
- Construction equipment training
- Safety procedures and hazard awareness
- Real-time performance evaluation

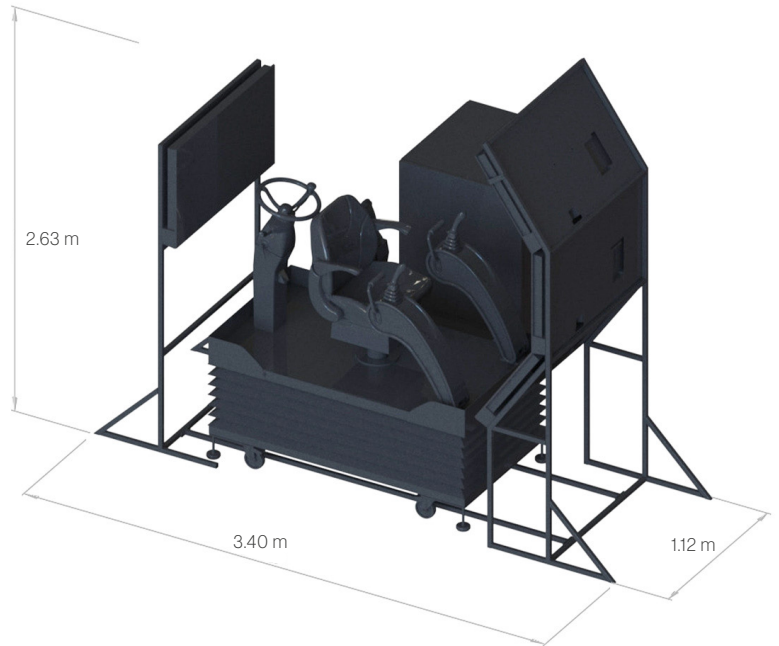
VR COMPATIBILITY

- Immersive experience
- Easy setup
- Future-ready



SANLAB 3DOF MOTION SYSTEM

- Adaptable brackets
- All-in-one user interface
- Plug and play
- Low latency feedback



DIMENSIONS

Overall Dimensions (L-W-H)	1.12 m - 3.40 m - 2.63 m
Net Weight (product only)	380 kg
Shipping Dimensions (L-W-H)	2.30 m - 2.20 m - 2.20 m
Crate Weight (total)	695 kg
Packaging Type	Wooden crate

ADVANTAGES

- Cuts fuel and operating costs
- Eliminates accident risks
- Increases safety
- Lowers maintenance needs
- Prevents machine downtime
- Protects equipment
- Enables all-weather training
- No worksite required
- Eco-friendly use
- Realistic experience
- Supports multiple languages

SCENARIOS

- Slalom
- Hill Driving
- Ghost Bucket
- Balls on Cones
- Bucket Path Following
- Digging
- Lowbed Loading
- Quick Attachment
- Breaker Positioning
- Soil Loading
- Object Loading
- Fork Loading
- Rock Loading
- Trenching

BACKHOE LOADER SIMULATOR

3DOF HEAVY EQUIPMENT SIMULATOR



SPECIFICATIONS

Gross Moving Load up to	500 kg
Motion System	4 electro-mechanical actuators
Power Supply	220VAC, 50 Hz
Display System	2 instructor monitors, 4 x 50" TV
Touch Screen	24" touch screen
Audio System	Surround stereo
Minimum System Requirements	Intel(R) Core(TM) i5 - 32 GB Ram - 120 GB SSD Harddisk NVidia GeForce RTX 3060 - Windows 10 Home Wireless Combo Keyboard Mouse

HARDWARE

- Real machine joysticks and pedals
- Industrial-grade operator seats
- Durable steel chassis
- Instructor control console with touch display
- Multi-display systems
- Modular design for upgradeability

SOFTWARE

- Modern 3D graphics
- Real-time GUI for trainee monitoring
- Scenario-based training modules
- Detailed performance analysis and reporting
- Environmental variations (weather, terrain)
- Rich selection of lessons

CANBUS SUPPORT

CANBUS supported architecture enables hardware-based stable communication between input units, motion system, and control modules, while the software infrastructure ensures high response sensitivity.

OPTIONS

- VR integration
- Desktop version

SERVICE & SUPPORT

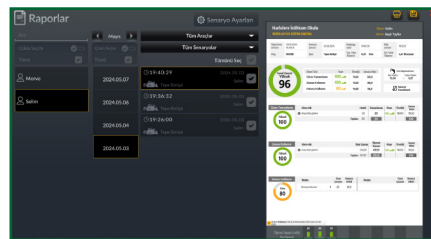
Committed to customer satisfaction, we deliver tailored support solutions designed to meet your specific operational requirements.



Scenario Screen



3DOF Backhoe Loader Simulator



Reports