Forestry Machine

Simulators

JOHN DEERE

Simulators ensure high productivity from the classroom to the forest

John Deere simulators work just like real machines in the forest

The new E-Series Simulators have all the same features as a real forest machine. Training simulators allow trainees to practice every stage of the harvesting process – from planning a stand to stacking cut timber at the roadside – in the classroom. Trainees can practice operating several machines at the same stand and even at the same time.

John Deere simulators provide the right solutions for every training requirement:

- Harvester and forwarder simulator
- Operation simulator, harvester and forwarder
- Operation simulator, forwarder
- Tracked machine simulator
- PC simulator

Operator training

A simulator is an excellent tool for training machine operators and service personnel. A simulator can be used to teach trainees different working methods, how to use the measuring system, and how to adjust the setup for the base machine.

Increasing productivity and performance

Training simulators allow trainees to repeat a particular stage in a process several times and to practice different working methods. The information supplied by TimberLink helps in monitoring changes in the machine's performance and the effects of various settings.

Real-time feedback

The simulator produces a real-time feedback report on all exercises. The report shows how long the operator took to complete the exercise, the volume of forwarded timber, key statistics on the efficiency of boom operation, and operator accuracy.

A realistic and peaceful learning environment

The simulators are equipped with the same measuring and control system used in real forest machines. They provide a safe environment in which to learn important skills before moving on to a real logging site.

Harvester and forwarder simulator

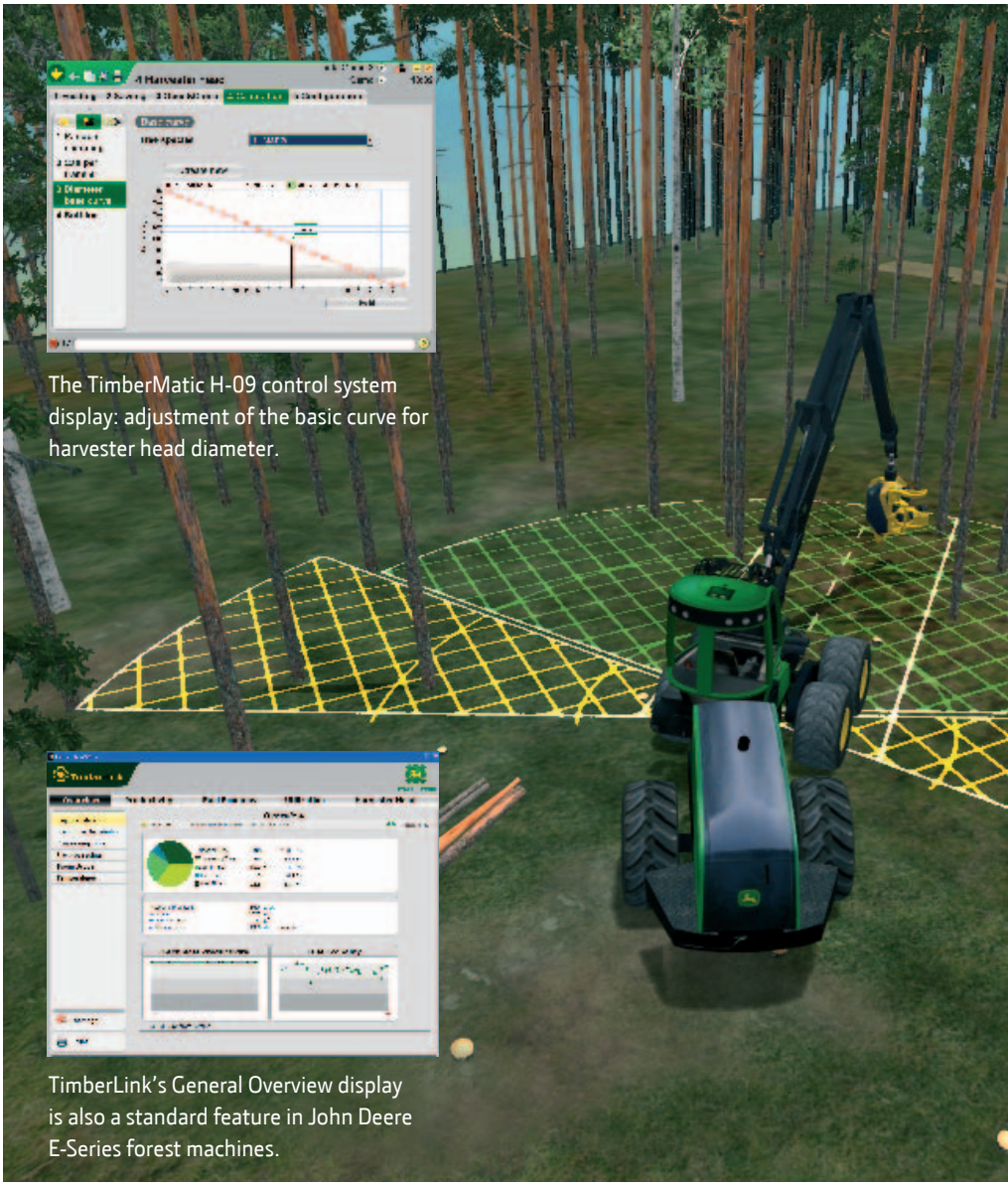
Added efficiency in training for machine operati

Operating simulator – as if you were operating a real machine in the forest.

The John Deere simulator has exactly the same keypads and seat, TimberMatic H-09 control system, and FlexController control modules as the real John Deere forestry machines. The forestry machine's operations are controlled with the TimberMatic H-09 control system, and parameters can be adjusted specifically to suit each operator and machine.

At the beginning of an exercise, the operator chooses the forest machine, harvester, or forwarder they wish to use. After this, the operator proceeds in the same way as they would with a real machine: Operator logs into the stand with personal machine operator ID and then proceeds with harvesting. The simulator can also produce a machine-specific real-time feedback report on all exercises. The report shows the time taken, the volume of timber produced, and the key statistics on operator accuracy.

The TimberLink program display gives a quick overview of the machine's performance. More detailed information, e.g. machine productivity, can be found on the other pages of the user interface.



The TimberMatic H-09 control system display: adjustment of the basic curve for harvester head diameter.

TimberLink's General Overview display is also a standard feature in John Deere E-Series forest machines.

A complete machine chain at one logging site makes training more realistic

It is possible to use numerous machines simultaneously at each stand by connecting several simulators to the same exercise. This enables simultaneous work by a complete production chain at one stand. All the users in a given exercise can see all the machines in use. Trainees can follow all the simulators in a classroom via a separate trainer's display.

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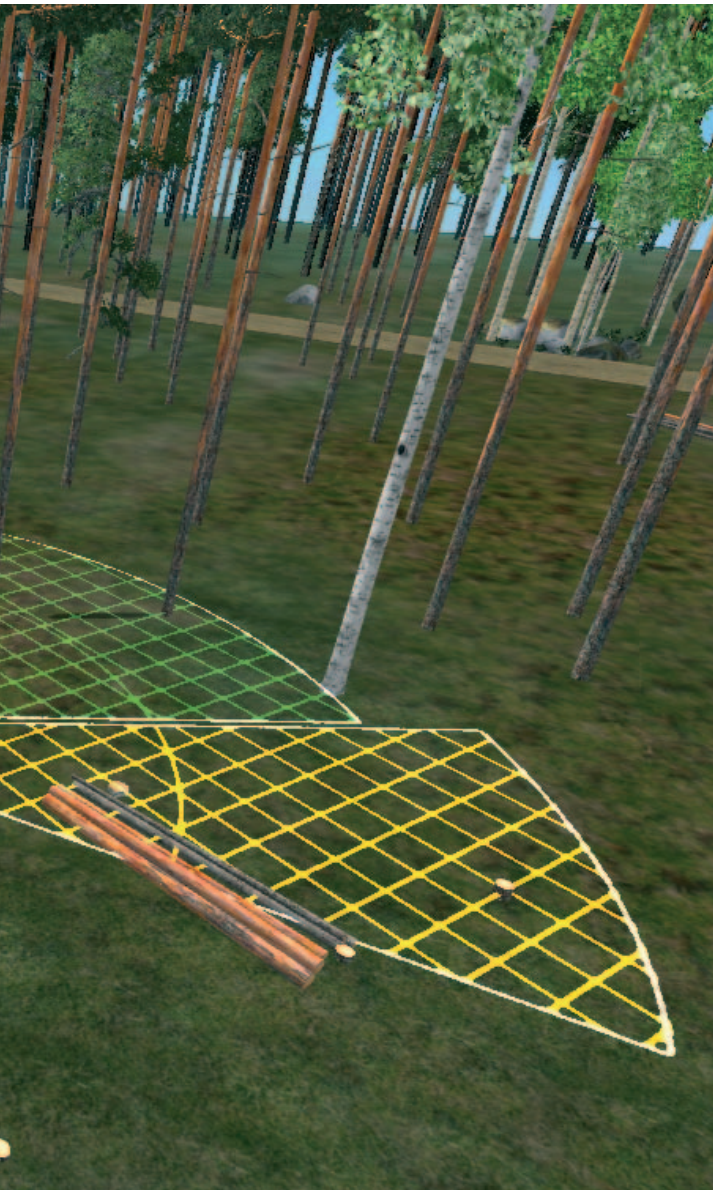


Operation simulator

Working method training for all machine makes on one simulator

Planning your work increases productivity

John Deere operation simulators are an efficient tool for teaching working methods and machine operation without the measuring and control system. Despite the absence of this feature, a simulator realistically replicates the forest terrain. Depending on the model, a forwarder or both forwarder and harvester may be trained on the operation simulator.

Scoring improves learning

Simulator exercises can also be scored. The simulator monitors various aspects related to the work carried out by a machine. Within these categories, assessment criteria are then chosen in the Score Editor program. The same exercise can be repeated several times, meaning that trainees can polish their skills and increase their productivity.

Simulators – a smooth transition to real machines and real logging sites

Tracked machine simulator

A realistic work environment ensures better learning

Tracked machine simulators are used to simulate the operations and working methods of the TimberRite measuring system and Waratah harvester heads. Simulators are equipped with the same components as real machines, including the TimberRite measuring system, control modules, and SureGrip joysticks. An exercise on a tracked machine simulator can be scored in the same way as a corresponding exercise on an E-Series Simulator.

PC simulator

Learn to use the control system at the office

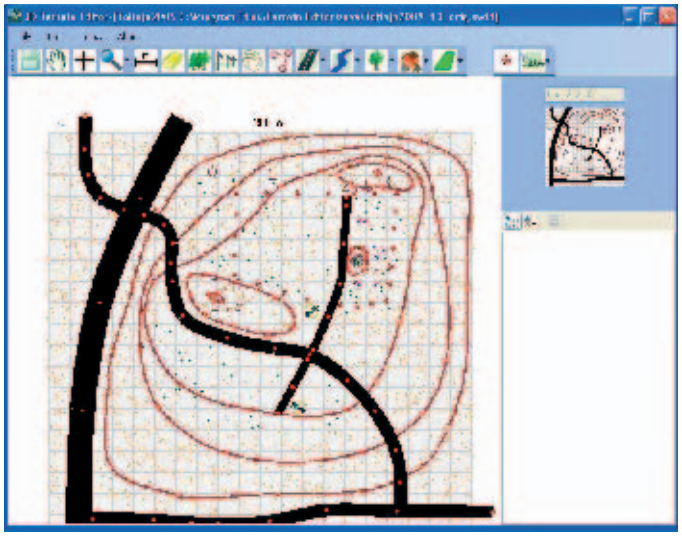
The PC simulator program has the same features as the harvester TimberMatic H-09 control system. Using the PC simulator, the machine operator can practice control system functions, e.g. calibration, stand control routines, and storing data on yields, at home or at the office, and make harvester work easier. It can also be used to simulate bucking of tree trunks (as STM files).

The PC simulator can be installed on computers at an office, at a forestry school, or even on an operation simulator. However, exercises completed and adjustments made on the PC simulator do not affect the forestry machine working on an operation simulator.

Terrain Editor

Your terrain, your exercise

Training terrains and stands are easy to create with the John Deere Terrain Editor program. Various types of trees (different species, straight, curved, or decaying trees), rocks, terrain types, driving tracks, etc. can also be added later on. Every E-Series Simulator includes one pre-programmed training terrain. The simulator exercises are compatible with all John Deere E-Series Simulators. The John Deere Terrain Editor is a separate program which can be installed on any PC.



Technical information

	Harvester and forwarder simulator	Operation simulator, harvester and forwarder	Operation simulator, forwarder	Tracked machine simulator	PC simu-lator
Dimensions*					
Operating Dimensions					
length x width (cm)	180 x 133	185 x 80	185 x 80	205 x 76	
height (cm)	180	140	140	180	
weight (kg)	240	155	155	245	
Transport Dimensions					
length x width (cm)	180 x 72	185 x 80	185 x 80	205 x 76	
height (cm)	130	115	115	130	
Operating voltage	230 V AC, 50 Hz / 115 V AC, 60Hz	230 V AC, 50 Hz / 115 V AC, 60Hz	230 V AC, 50 Hz / 115 V AC, 60Hz	230 V AC, 50 Hz 115 V AC, 60Hz	
Simulation					
Harvester	●	●			
Forwarder	●	●	●		
Tracked machine				●	
Simultaneous use of simulators	●	●	●		
Programs and equipment					
Measuring and control system	●			●	
TimberMatic H-09	●				●
FlexController control modules	●				
Hand panels for E-series machines	●	●	●		
TimberRite				●	
HHM module				●	
SureGrip Joysticks				●	
TimberLink	●				
Score Editor	●	●	●		
Terrain Editor	●	●	●		
Language setting					
English	●	●	●	●	●
Finnish	●	●	●		●
French	●	●	●	●	●
German	●	●	●	●	●
Russian	●	●	●		●
Spanish	●	●	●		●
Swedish	●	●	●		●
Optional equipment					
Display	●			●	
Measuring calipers	●			●	
Trainer's display	●	●	●		

*) The dimensions given are nominal dimensions and may vary depending on optional equipment.

Supporting harvesting from start to end

Why use comprehensive harvesting solutions from one supplier? Simply put, having John Deere as your cooperative partner is practical. We produce over 100 reliable, quality forestry products. Our global distribution network ensures that there is always a dealer nearby to support your company with maintenance and spare parts services. We also know the forestry business and can give you the resources and support that only a global corporation can provide.

For more information on John Deere Forestry, contact your local dealer or read about us on the Internet.

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