

# SkyTechSport interactive simulators



proud  
partner

Bringing Real Physics  
into the Virtual Reality



WINNER

2014/2015



## How it works?

The screen for the virtual slope can be the standard size and format, or it can be a super wide panorama screen

Virtual slope synced to every movement on the simulator

Control units of the simulator

Drive system and sensors are placed inside the simulator

Every simulator can be equipped with a ski or snowboard imitator, about 2-3 minutes are required to change from skis to snowboard

Optical safety system that automatically detects all potential dangers and switches off the power drive





## What technology do we use?



### Smart sensors to track your motion

The simulator knows everything you are doing with your skis or snowboard. Multiple built-in sensors track all the parameters, such as the position of your skis on the slope and your edging angles.



### Main computer to analyze response from skis or snowboard

The main computer of the ski simulator empowers you to choose your trails and adjust all the snow conditions, including hard-packed, soft or icy snow. It can also generate bumps on the slope and create mogul-like terrain.



### Powerful drive system to recreate G-force

Powerful motors are responsible for simulation of physics and bio-mechanics of skiing. We put most of our time and efforts to transfer the G-force as is from the slopes onto a ski and snowboard simulator.



### Virtual reality to visualize your experience

A unique 3D-engine and a three-unit multimedia-projection system generate a huge image of the running slope with a stunning resolution. Everything you do on the simulator syncs to the slope. So be careful do not hit the trees!

## Making that First Run...



- Beginners can learn the basics of skiing and snowboarding indoors
- Unique training guidelines for snow sports allow you to learn how to ski or snowboard within just a few days
- Rapid and effective training of all elements of modern carving ski and snowboard technique for advanced skiers and snowboarders

## Getting a Work-Out



- Engages all main muscle groups
- Doesn't constrain the motion to a single muscle unlike traditional gym equipment
- Gives a unique combination of strength and cardio exercises, as well as trains your sense of balance
- Virtual ski and snowboard courses make training sessions extremely exciting!

## Racing or Competing



Andrew Weibrecht, U.S. Ski Team

- Train and practice all year round
- Virtual courses allow to perfect slalom, GS, super G and even Olympic Downhill
- Simulators are widely used by professional ski teams in many countries

## How can I control my slope?

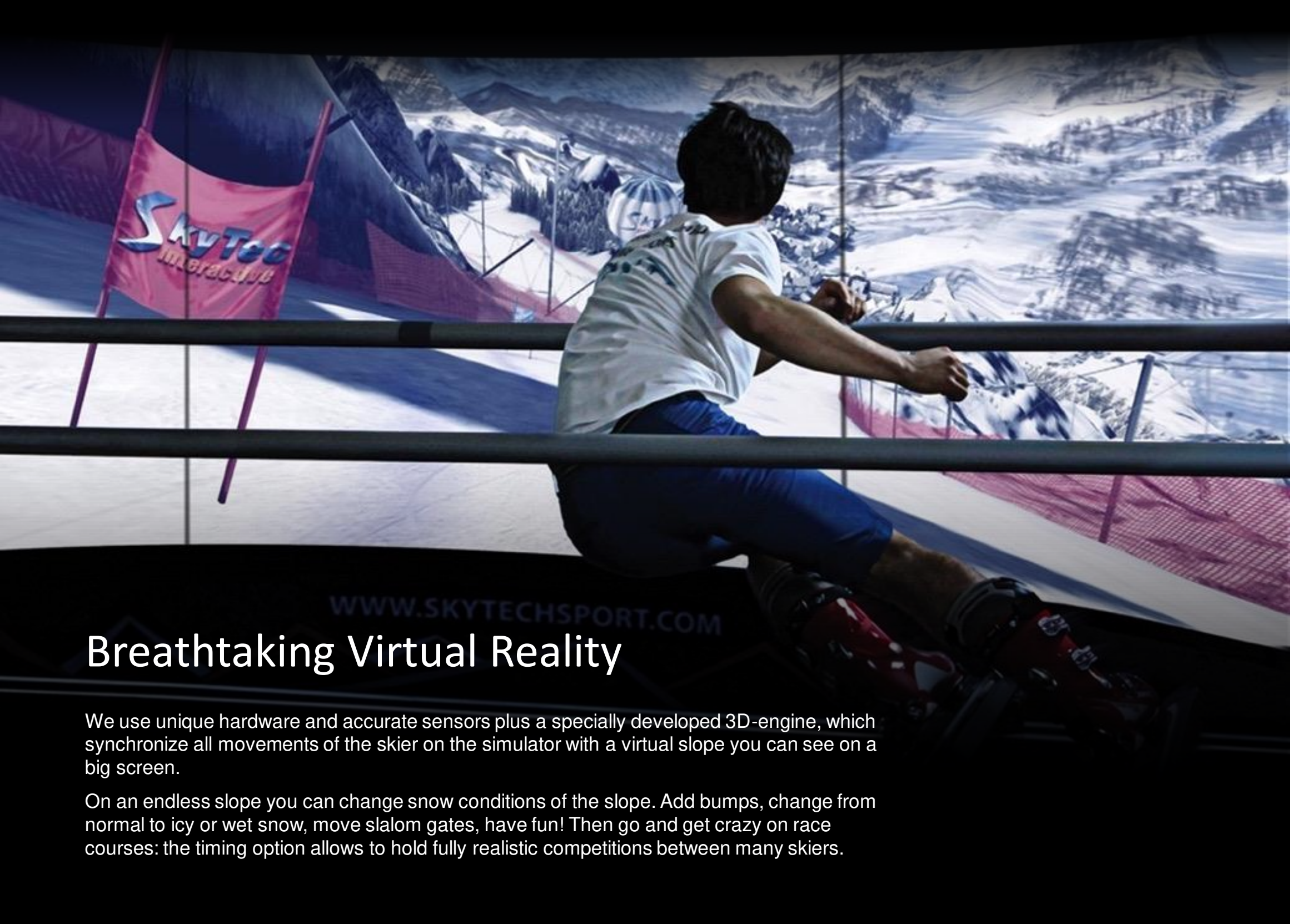


The interface displays the following information and controls:

- Training Time:** 00:46:13
- Time:** 15:35:01
- Force applied to skis:** 143 kgs
- Calories consumption:** 543
- Turns:** 1344
- Snow type menu:** NORMAL, ICY, HEAVY
- Bumps and crust menu:** MICRORELIEF, CRUST, HARD CRUST, SMALL BUMPS, BIG BUMPS
- Speed control:** SPEED CONTROL, km/h, CONSTANT SPEED, INTERACTIVE MODE, 80
- 3D mode:** DISPLAY MODE
- Slalom gates adjustments:** GATES, TASKS, TESTS, GATES LAYOUT, REGULAR, FLASH, COMBINATION, RANDOM
- Data about edging angles:** ADJUST WIDE TURNS, ADJUST SHORT TURNS, WIDTH, PERIOD, SHIFT, PERIOD
- Training session statistics:** STATISTICS
- Sound:** SOUND
- Main Menu:** MAIN MENU

A hand is shown interacting with the screen, specifically pointing at the 'TURN ON' button and the 'STOPWATCH' section.





## Breathtaking Virtual Reality

We use unique hardware and accurate sensors plus a specially developed 3D-engine, which synchronize all movements of the skier on the simulator with a virtual slope you can see on a big screen.

On an endless slope you can change snow conditions of the slope. Add bumps, change from normal to icy or wet snow, move slalom gates, have fun! Then go and get crazy on race courses: the timing option allows to hold fully realistic competitions between many skiers.



## GPS scouting

Our technology allows to recreate any slope from any ski resort in the world, we've already scanned and rendered it in meticulous details:

- Sochi race courses for 2014 Olympic Games
- 2015 Beaver Creek World Championship courses

The new technology is already being used by the world's top ski teams.







Travis Ganong – the future of U.S.  
downhill skiing!

The Denver Post



2015

2<sup>nd</sup>

FIS World Championships

2014

5<sup>th</sup>

Winter Olympics

— started simulator training

2012

30<sup>th</sup>

World Cup

2011

24<sup>th</sup>

FIS World Championships







SkyTechSport

LEARNING HOW TO SKI  
HAS NEVER BEEN EASIER





## New Leader Pro

### The Compact Solution

The New redesigned Leader Pro is a compact solution for training centers or home. The simulator is built to practice alpine carving for complete beginners and intermediate skiers.

platform width: 3.35m / 11'

power: 2.2 kW / 3 HP

VR trails: endless course + slaloms

### HD or 4K Ready

The Simulator is ready to connect to your LED-panel or projection system in HD or 4K on your choice.

Includes skis or snowboard imitator on your choice.

### HD Screen

The Simulator comes with a 50" LED-panel. Includes skis or snowboard imitator on your choice.

### 4K Panorama

The Simulator comes with a 3-unit LED-wall on your choice. It is also equipped with a high-capacity computer system to run virtual slopes on wide screens.

Includes skis or snowboard imitator on your choice.



## President

The Optimal Commercial Solution

President is a perfect choice for working with a wide spectrum of clients: from teaching children and beginners to sports training for advanced skiers and snowboarders.

platform width: 5.75m / 18'10"

power: 4.4 kW / 6 HP

VR trails: endless course + slaloms + giant slaloms

### HD or 4K Ready

The Simulator is ready to connect to your LED-panel or projection system in HD or 4K on your choice.

Includes skis or snowboard imitator on your choice.

### HD Screen

The Simulator comes with a flat projection screen (2.74 x 2.06m / 108" x 81"), 3000 Lm projector and a Hi-Fi audio system.

Includes skis or snowboard imitator on your choice.

### 4K Panorama

The Simulator comes with a super-wide panoramic screen (up to 7.3m / 24' wide) integrated into VR-Room, three 3000 Lm projectors and a Hi-Fi audio system.

Includes both skis and snowboard imitator.





## President LUX

More Power for Athletic Training

30% more power means more G-force for advanced skiers and ski racers. Accelerations created by the drive system of simulator result in more efficient training of all elements of technique and rapid improvements in balance and reaction.

platform width: 5.80m / 19'

power: 6.0 kW / 8 HP

VR trails: endless course + slaloms + giant slaloms

### HD or 4K Ready

The Simulator is ready to connect to your LED-panel or projection system in HD or 4K on your choice.

Includes skis or snowboard imitator on your choice.

### HD Screen

The Simulator comes with a flat projection screen (2.74 x 2.06m / 108" x 81"), 3000 Lm projector and a Hi-Fi audio system.

Includes skis or snowboard imitator on your choice.

### 4K Panorama

The Simulator comes with a super-wide panoramic screen (up to 7.3m / 24' wide) integrated into VR-Room, three 3000 Lm projectors and a Hi-Fi audio system.

Includes both skis and snowboard imitator.



# Olymp

The Downhill Pro Simulator



platform width: 7.00m / 23'2"

power: 7.50 kW / 10 HP

VR trails: endless course + slaloms + giant slaloms + downhills

This is our largest and most powerful simulator.

A duet of advanced software and brand new **Kinematic Power Vest** — the Downhill Simulator has become a turning point in professional winter sports training.

This simulator gives the opportunity to experience all physics of athletic modern carving identical to the real slope slalom through downhill.

## 4K Panorama Downhill

The Simulator comes with a super-wide panoramic screen (up to 8.22/26'11" wide) integrated into VR-Room, three 3000 Lm projectors, 3D goggles and a Hi-Fi audio system.

Includes both skis and snowboard imitator.





Additional kinematic power set is used to create an equivalent of compression and vibration loads.

- A vest connected to power kinematics of the Simulator that is synced with the virtual slope terrain
- A distributed load through the body axis: shoulder girdle, mid-back, hips and legs
- A compression force with a load value up to 330lbs / 150kgs.

## Downhill Pro package

The system includes a kinematic power set together with a package of GPS-replicas of Beaver Creek and Sochi Olympics downhill courses.

The system is already included into the supply for Olymp 3D-Panorama Downhill simulator and can be provided as an additional option for other models of the ski simulators.



### Additional Ski or Snowboard Imitator

Every simulator can be equipped with a ski or snowboard imitator, about 2-3 minutes are required to change from skis to snowboard



Special ski that allows to use the simulator with one leg. Used for balance and Paralympic Training.

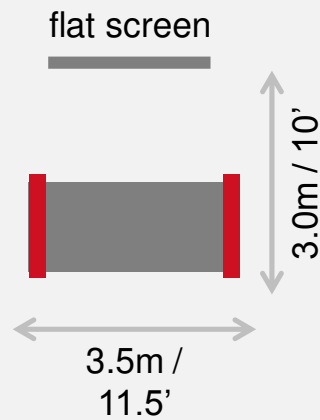
### Support

- 24/7 technical support with our phone «hot-line»
- Remote software upgrades, including: user interface upgrades
  - operating system upgrades
  - uploads of new ski areas
- Training of technical personnel and training of instructors by certified SkyTechSport experts – anywhere in the world



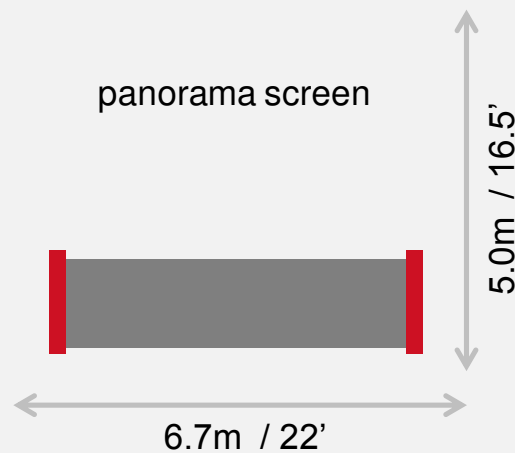
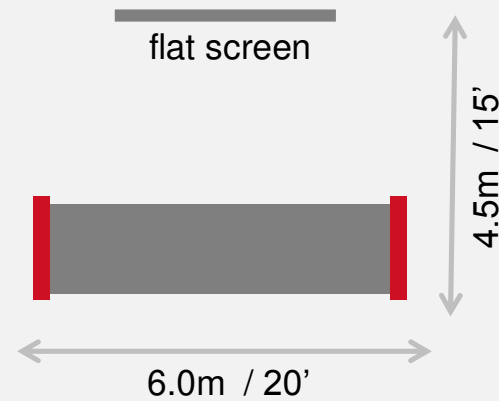
HD Screen

## Leader Pro

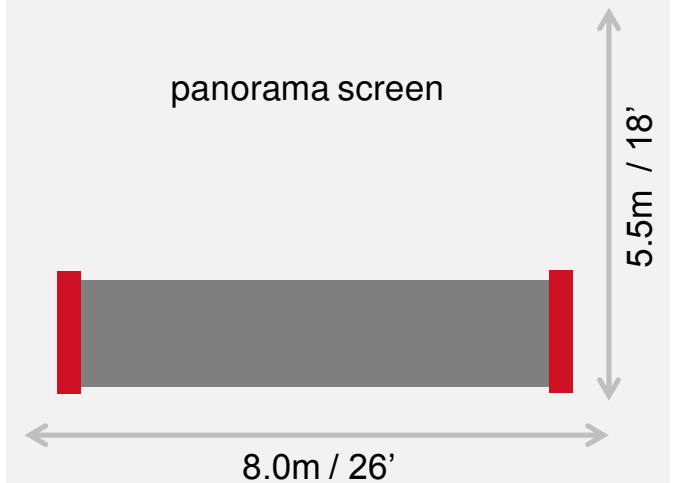


4K Panorama

## President / President Lux



## Olymp



Required ceiling height – min 2.5m / 8'

Required ceiling height - min 2.7m / 9'

Required ceiling height – min 3.0m / 10'



U.S. Ski Team Member, Andrew Weibrecht  
Silver in Super-G at 2014 Winter Olympics