



DISABILITY DRIVER TRAINING SIMULATOR

INDICATOR
EXTENSION
ARM

PUSH PULL
HAND
CONTROL

SPINNER
KNOB

SAFE, AFFORDABLE AND EFFECTIVE DRIVER TRAINING FOR THE DISABLED

SIMWORX has seen the need to safely train physically challenged drivers in the use of specialised car controls, without the inherent risk of doing so on the open road.

We would like to give disabled people across Australia the opportunity to live a fuller life, by learning to use their hand controls safely, increase their skills and boost confidence. The vehicle is modified to their specific needs.

We can fit spinner knobs, pedal hand controls of different styles and indicator extensions that would normally be fitted to their every day vehicle.

The large variety of lessons we supply can place the trainee in a range of challenging situations.



Virtual Traffic Situations



Spinner Knob



Custom fit controls

DISABILITY SX06DTS

Because we want to do everything we can to increase their independence and maintain their freedom and mobility, by using a quality simulator fitted with real car hand controls prepares them extremely well for the dramatic transition to operating a real car. Instructors appreciate it because there is no risk to their trainee or themselves and in a simulator a disabled driver's ability can be safely assessed. We love to show people that they don't necessarily need to give up driving just because of a disability, medical condition or amputation. With that in mind the SX06DTS is eminently suitable for this training discipline by fitting certified real world car controls for trainees to practice over and over using the hand controls whilst in virtual traffic situations..

The hand controls used by Simworx have been manufactured to comply with Australian standards certified (AS3954.1/ 1991 and (AS3954.2/1991). These are QUEENSLAND TRANSPORT Approved. There are basically two types that we can fit:-

THE PUSH/PAT HAND CONTROL

The Push / Pat hand control is designed to apply brakes when the hand-piece is pushed towards the dash, and the accelerator is operated when the hand-piece is moved in an arc downward. With the Push / Pat control, the accelerator can be applied along with the brake. This control can also be set up for left side operation and even an upward arc of the hand-piece to apply the accelerator if required.

THE PUSH/PULL HAND CONTROL

The Push / Pull type of hand control is the most popular, it utilizes the same braking operation as the Push / Pat control, (push towards the dash to apply brakes) however to accelerate, the hand piece is pulled back, towards the driver. These controls can be set up for Right side or Left side operation.

DTS SOFTWARE

THE TRAINING PROGRAM HAS A SET OF 36 LESSONS AND ALL LESSONS ARE SELF RUNNING. They range from the basics of driving (learning to change gear, start the engine etc.) to city driving, motorway/freeway and highway driving and examination training.

The lessons ensure that the trainee learns to drive safely with appropriate awareness of the changing environment around them. A virtual instructor examines the behavior of the trainee in relation to the road type, road signs, other traffic and type of task. If the trainee commits an error, computer generated verbal feedback is given about the nature of the error. Instructions are provided via graphical popups on the centre screen, and verbal instructions are also supplied.

During all lessons performance is tested and stored in the student's assessment system. At the end of the lesson, a computer generated report is printed with a list of driver tasks together with the number and types of errors, fuel consumption, distance driven, etc. The report can be used by the operator for debriefing. Student data is all stored on a separate USB stick.



DISABILITY SX06DTS

Increasingly, contemporary driving simulators are becoming an important tool in driver training. Specific skills can be trained and critical learning situations can be presented repeatedly to the students.

A good simulator offers opportunities for more efficient and faster learning of driver skills. None more so than in the area of rehabilitation of drivers with disabilities.

Training is faster because the student is learning the driving tasks in a stress free environment with real world car hand controls. Most simulators focus mainly on the basic skills and their usability is limited to the first part of driver training programs. Simworx simulators, on the other hand, practice traffic participation and training of traffic insight. Most of the lessons occur in high traffic density in built up areas, on motorways and highways.

The Simworx SX06DTS Impaired Driver Training Simulator utilizing state of the art formatted software, is ideal for teaching disabled drivers to drive using hand controls. Driver training is faster in simulators compared to the traditional methods and a lot safer. For that purpose we offer complete disabled driving simulator systems.

The simulators feature real world hand driving controls and layout. Incorporating a steering wheel with a spinner knob, brake pedal and accelerator pedal hand controls, handbrake, indicator stalk, headlight-high beam stalk switch and seat belt. The trainee is seated in a real adjustable driver's seat and is surrounded with a 2.1 Dolby sound system. Three 24" or 27" HD widescreen display panels fitted to the simulator also gives the student a 180-210 degree horizontal field of view. The images are presented at a very high frame rate in HD. The operator has an integrated user interface whereby they can control assignments and assess student's progress.

The SX06DTS Disabled Driving Simulator comes complete turn key with installation and training

A total of 36 modules are included in both versions, including a module, dedicated to alcohol induced impaired driving. 3D Dolby sound as standard, results in a more realistic

traffic experience. The operator has full control of lesson format from his own user interface and can introduce rain, fog and night driving modules to introduce the trainee to the challenging conditions that they would come across in the real world. The traffic system is very advanced, and results in highly realistic traffic scenarios.

Challenges such as Freeway on and off ramps, freeway on ramp merging and lane changing in high density traffic, which includes trucks, is covered extensively. Random Hazards are also introduced in the more advanced modules. Overtaking scenarios on normal roads is another element within the lessons.

**IN-STUDIO
SIMULATOR**

- Full Cockpit with all controls
- Car Steering Wheel with spinner knob
- Accelerator & Brake pedals fitted with hand controls
- Adjustable driver's car seat
- Inertia Reel Seatbelt
- Auto gear shifting
- Handbrake
- Indicator stalk (optional extension)
- Lights switch on stalk
- Ignition Key start
- 3 channel view + 3 active mirrors
- High end PC with Software Package
- 3 x 46" HD LCD Screens
- 2.1 Dolby surround sound
- Laser printer for Student results
- Wireless keyboard and mouse
- Keyboard Stand

**PORTABLE
SIMULATOR**

- Full Cockpit with all controls
- Car Steering Wheel with spinner knob
- Accelerator & Brake pedals fitted with hand controls
- Adjustable driver's car seat
- Inertia Reel Seatbelt
- Auto gear shifting
- Handbrake
- Indicator stalk (optional extension)
- Lights switch on stalk
- Ignition Key start
- 3 channel view + 3 active mirrors
- High end PC with Software Package
- 3 x 46" HD LCD Screens
- 2.1 Dolby surround sound
- Laser printer for Student results
- Wireless keyboard and mouse
- Keyboard Stand
- Heavy duty casters for portability

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