



**SIMULATOR** ■ **SALES** ■ **RENTAL** ■ **SOFTWARE**

**NEW!**

**CONSTRUCTION SIMULATOR**







## RENTAL

Our simulators have been used at numerous road safety events and conferences in Australia.

We have several rental simulators based in Brisbane. This includes a road safety (driver education) simulator and a top-spec motorsport racing simulator.

We have a trailer with opening sides which can be positioned at an event and participants watch from the stools we provide. Or the simulator can be unloaded and moved into a classroom or function area.

There are several other owners of our simulators around Australia who also provide a rental option.

Simulator rental is only for ages 16+ and includes an instructor to oversee the operation of the system(s).

## SDT SIMULATORS

The driving software has been customized for Australia with local road signs and your choice to drive local Holden Commodore or Ford Falcon vehicles (plus many other vehicles). Users can set the time of day, vehicle type, transmission, weather, traffic density, traffic aggression and the route (suburbs, freeway, country road, mountains). Hazardous situations and mechanical problems can be turned on to test reactions.

## SALES

There are over **75** of our simulators in use around Australia, plus in many overseas locations.

We offer a range of simulator models. Our philosophy is to keep the system affordable, easy to repair and easy to replace the computer hardware.

As such we use off-the-shelf sled style simulator frames that have been modified to include a real seatbelt and handbrake. Or we have a partially enclosed simulator frame with the buyer choosing the colour. These systems include a sticker package to theme the simulator with your brand or sponsors logos.

Our simulators are supplied as a turn-key driver training solution, with driver education videos, eLearning modules and training resources like Fatal Vision™ impairment goggles.

Your trainers can receive on-site induction or software training via virtual meetings. Plus we have many user troubleshooting and support videos.

## USE SIMULATORS TO TRAIN DRIVERS ON:

- Starting procedures
- Correct use of the pedals
- Gear changing (manual gear selector, automatic or tiptronic paddle shift)
- Hill starts (if handbrake is fitted)
- Emergency brake application
- Steering techniques (good and bad)
- Driving procedures (system of car control, lane position, changing lanes, parking, merging, bends, dealing with traffic, roundabouts, pedestrians)
- Scanning and Hazard Perception
- Vision ahead through corners
- Trailer towing and trailer reversing

## SOFTWARE

The **City Car Driving Simulator** software can be purchased as a stand-alone item to be used in your own driving simulator system.

We have converted many older simulators over to our software.

The software is a multi-user commercial licence, with all vehicles and routes unlocked.

The software supports triple screens and does not require constant internet access.

Software licence holders **do not** pay an annual subscription.

It is available with both LHD and RHD vehicles and supports many languages including French, Spanish, Mandarin, Japanese, German and Bahasa Malay.

Software licence holders are authorised to use the program to create social media driving videos.

## DEMONSTRATE THE CONSEQUENCES OF:

- Unsafe driving such as tailgating, weaving through traffic, speeding
- Variable weather conditions (fog, wet roads, snow, ice, dust)
- Disobeying Road Rules
- Distracted driving (phone use)
- Reaching for an item
- Alcohol Impairment (using Fatal Vision™ impairment goggles)
- Fatigue or zoning out
- Aggressive driving
- Emergency/hazardous situations
- Skidding (understeer/oversteer)
- Unsafe use of a trailer or 4WD



# PROMOTIONAL VIDEOS

**CLICK ON ANY TITLE BELOW TO WATCH THAT VIDEO**

-  **SDT SIMULATOR RANGE PROMOTIONAL VIDEO** <https://youtu.be/mHYlvRILUIs>
-  **WHAT UNIQUE THINGS CAN A SIMULATOR TRAIN FOR?** [https://youtu.be/4i\\_jCJhb-j4](https://youtu.be/4i_jCJhb-j4)
-  **WHAT RESOURCES COME WITH A SIMULATOR?** <https://youtu.be/Wtx4bVaH8e4>
-  **HOW DO I? FREQUENTLY ASKED QUESTIONS** <https://youtu.be/NxjeHq6HEOs>
-  **CAN THE HOME EDITION BE USED FOR BUSINESS** <https://youtu.be/NcxbMbuulcs>
-  **WATCH OUR COMPANY PROFILE VIDEO** <https://youtu.be/CI50YZbtCo>



# SIMULATOR RANGE VIDEO



SDT - 21A MODEL



SDT - 21B MODEL



SDT - 21C MODEL



SDT - 21D MODEL





## SDT-21A (school pack)



This low cost driving simulator system is designed for schools and colleges that already have their own IT Department with skilled personnel, plus their own computer systems, monitors and/or VR goggles. The simulator consists of the steering wheel, pedals and gear lever mounted to a metal frame and an authorized copy of City Car Driving with the additional software, videos and driver training resources outlined is supplied via USB for installation on a Windows 10 O/S computer.

### SPECIFICATIONS

- Simulator Frame:** Powder coated collapsible metal frame with telescopic construction  
Can be setup (or swapped) from Right Hand Drive to Left Hand Drive  
Office chair is needed for driver to sit in
- Hardware:** Logitech G29 or G920 Force Feedback Steering Wheel, Pedals and Gearlever
- Software:** Supplied with authorised multi-user licenced Enterprise version of City Car Driving  
Software training and induction is via user training videos
- NOT SUPPLIED:** *Requires a computer with Intel i5 7400 Quad Core i5 3.0 GHz CPU or similar  
8GB RAM (DDR4), Windows 10 operating system,  
Graphics Card Inno3D GeForce GTX 8GB or similar  
Requires suitable monitors (75Hz or better)*
- Training Resources:** Supplied with 1 x Fatal Vision Alcohol impairment goggle, 1 x Eye Sight Chart, 2 x Alco-cup standard drinks glass, 10 x Defensive driving handbooks, Driver assessment form + the additional driver training software and videos outlined in this document.

**PRICING:** **Australian Buyers:** **AUD \$7,095.00 inc GST**

**Payment Terms:** We can supply an official quotation once the delivery location is known.

FOR AUSTRALIAN ORDERS:	FOR ALL INTERNATIONAL ORDERS:
<ul style="list-style-type: none"> <li>Purchase Order must be received</li> <li>50% deposit required to confirm order</li> <li>Full payment due within 7 days of delivery</li> </ul>	<ul style="list-style-type: none"> <li>Full payment required to confirm order (this is not negotiable)</li> <li>Credit card payments will not be accepted</li> </ul>



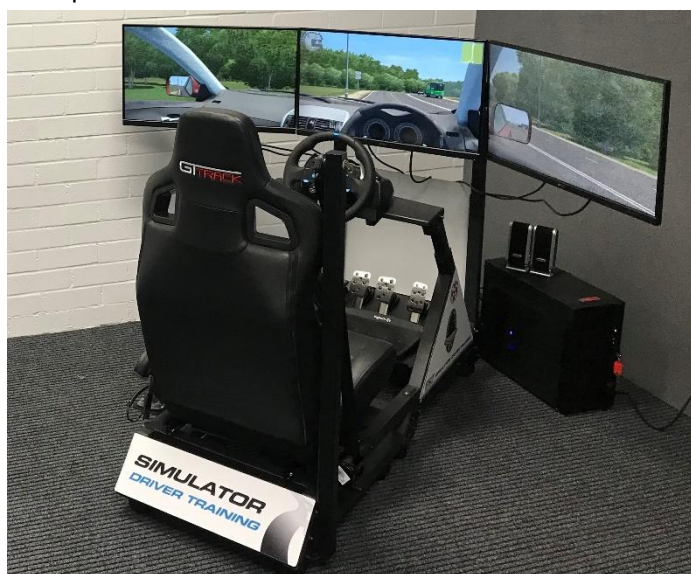


## SDT-21B SIMULATOR



This sled-style simulator operates on premium **City Car Driving** software. It is supplied with triple 27inch screens and comes ready to drive with a steering wheel, gearlever, pedals, driver's seat and a real road car seatbelt and handbrake are fitted and electronically linked to the simulator software. The simulator frame has castor wheels for relocating.

An optional **Motion Platform** can be added to this frame.



### SPECIFICATIONS

Simulator Frame:	Powder coated frame with telescopic construction (adjustable dimensions) Frame can be changed from Right Hand Drive to Left Hand Drive Castor wheels allow easy movement of the simulator Triple screen mounting system attached to the simulator frame Sports seat with real road car seatbelt + handbrake linked to the driving software Branding panels for sponsors/company logo's
Hardware:	Computer has: AMD AM4 Ryzen 5 5600G 6 Core 3.9GHz CPU 8GB RAM (DDR4), RTX3060 12GB Video Card 120GB SSD Hard Drive, Windows 10 operating system, 3 x 27 inch gaming monitors with built in speakers Wireless keyboard with in-built mouse tracker pad Logitech G29 or G920 Force Feedback Steering Wheel, Pedals and Gearlever All cables + power board with surge protection
Software:	Authorised multi-user licenced Enterprise version of City Car Driving <i>(the motion version uses upgraded simulator software to support this capability)</i>
Training Resources:	Supplied with 50 x Defensive Driving Course eLearning log-ins, 1 x Fatal Vision Alcohol impairment goggle, 1 x Distract-A-Match game, 1 x Eye Sight Chart, 2 x Alcop standard drinks glass, 2 x Driver Training Posters, 25 x Defensive driving handbooks + the additional training software and videos outlined in this document



The buyer of the SDT-21B simulator system receives customized branding for their simulator. Your logo is inserted into the simulator decals which are attached to the frame prior to delivery. This means your simulator will promote your business and/or sponsors name and look amazing.



## PRICING:

### Standard SDT-21B simulator

**Australian Buyers: AUD \$16,390.00 inc GST**

**International Buyers: USD \$11,000.00**

### Motion Platform with SDT-21B simulator

**Australian Buyers: AUD \$23,100.00 inc GST**

**International Buyers: USD \$14,000.00**

FOR AUSTRALIAN ORDERS:	FOR ALL INTERNATIONAL ORDERS:
<ul style="list-style-type: none"> <li>• Purchase Order must be received</li> <li>• 50% deposit required to confirm order</li> <li>• Full payment due within 7 days of delivery</li> </ul>	<ul style="list-style-type: none"> <li>• Full payment required to confirm order (this is not negotiable)</li> <li>• Credit card payments will not be accepted</li> <li>• Supplied fully assembled in wooden crate</li> </ul>



## SDT-21C SIMULATOR

Our most popular model, the SDT-21C is a partially enclosed simulator with a custom designed frame operating on premium **City Car Driving** software. It has triple 27inch screens, a real road car seat, seatbelt and handbrake that are linked to the software. This simulator is portable (using a trailer with ramps) and is suitable for Driving Schools and High Schools seeking a professional simulator for novice training.



### SPECIFICATIONS

- Simulator Frame:** Powder coated custom designed frame with triple screen mounting  
 Can be ordered as Right Hand Drive or Left Hand Drive setup  
 Front wheels and rear handle for lifting and movement  
 Road car seat, seatbelt and handbrake mechanism all linked to software  
 Customised full-colour branding (decals) supplied with your company name and logo  
 The buyers chooses the powder coating colour for their simulator frame
- Hardware:** Computer has: AMD AM4 Ryzen 5 5600G 6 Core 3.9GHz CPU  
 8GB RAM (DDR4), RTX3060 12GB Video Card  
 120GB SSD Hard Drive, Windows 10/11 operating system  
 3 x 27 inch gaming monitors  
 Wireless keyboard with in-built mouse tracker pad  
 Thrustmaster GT300 GT Edition Steering Wheel, Pedals and Gearlever  
 All cables + powerboard with surge protection + external speakers
- Software:** Authorised multi-user licenced Enterprise version of City Car Driving
- Training Resources:** Supplied with 50 x Defensive Driving Course eLearning log-ins, 2 x Fatal Vision Alcohol impairment goggle, 1 x Distract-A-Match game, 1 x Eye Sight Chart, 5 x Alcup standard drinks glass, 2 x Driver Training Posters, 25 x Defensive driving handbooks + the additional training software and videos outlined in this document

**PRICING:** **Australian Buyers: AUD \$22,583.00 inc GST**  
**International Buyers: USD \$14,000.00**

**Payment Terms:** We can supply an official quotation once the delivery location is known.  
 This will add delivery, setup and on-site training (as required)

FOR AUSTRALIAN ORDERS:	FOR ALL INTERNATIONAL ORDERS:
<ul style="list-style-type: none"> <li>Purchase Order must be received</li> <li>50% deposit required to confirm order</li> <li>Full payment due within 7 days of delivery</li> </ul>	<ul style="list-style-type: none"> <li>Full payment required to confirm order (this is not negotiable)</li> <li>Credit card payments will not be accepted</li> <li>Supplied fully assembled in wooden crate</li> </ul>



# Option #1: STEM: Physics in Motion add-on pack +\$6600 per simulator per year

- 1 year commercial licence to BeamNG driving simulation software which allows vehicle crashes to be modelled and analysed

The BeamNG soft body physics engine is at the core of the most detailed and authentic vehicle simulation you've ever seen in a simulation program. Every component of a vehicle is simulated in real-time using nodes (mass points) and beams (springs). Crashes feel visceral, as the game uses an incredibly accurate damage model.

BeamNG offers dozens of refined, completely customizable vehicles to experiment with. Whether it's a compact car or massive truck, players can tweak away at all the moving parts to create just about any driving experience desirable. Wheels, suspension, engines, and more; everything is under your control.

There's plenty to discover while driving. Featuring 12 sprawling, beautiful open-world environments, the terrain feels as vast and diverse as the gameplay options. Test out a new setup through tropical jungle passages, barren deserts, urban boulevards, packed highways, and much more.



BEAM NG PROMOTIONAL VIDEO

<https://youtu.be/btnT7kKx8RI>



## ➤ 75 logins to Physics in Motion Online Science Course

Users login and explore modules covering topics such as:

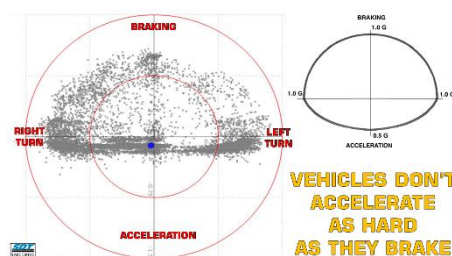
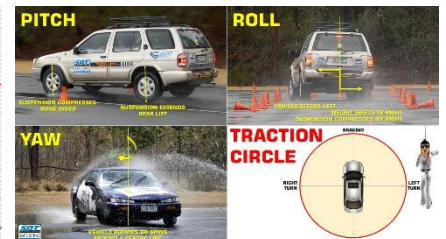
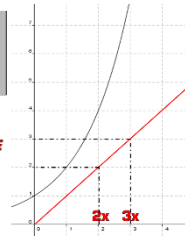
- ✓ Acceleration (Newtons Laws of Motion + acceleration/deceleration forces, speed vs velocity)
- ✓ Braking (how brakes work, braking distances vs mass and speed, review of data)
- ✓ G-Force (3 dimensions forces on a vehicle, how g-force is measured, data examined)
- ✓ Crash Analysis (reviews crashes we have staged for physics calculations)
- ✓ Vehicle Dynamics (the friction circle of a vehicle and how this affects driving safety)
- ✓ Vehicle Safety Systems (how ABS, TC, ESC, SRS airbags and seatbelts work)



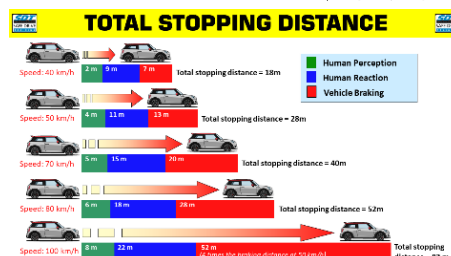
$$E_{kinetic} = \frac{1}{2}mv^2$$

2 x MASS =  
2 x KINETIC ENERGY  
**DOUBLE BRAKING DISTANCE**

3 x MASS =  
3 x KINETIC ENERGY  
**TRIPLE BRAKING DISTANCE**



**VEHICLES DON'T  
ACCELERATE  
AS HARD  
AS THEY BRAKE**







## SDT - 21C CONSTRUCTION

This is a partially enclosed simulator with a custom designed frame. It has a 35 inch curved monitor, seatbelt and an adjustable driver's seat. There are twin foot pedals for machinery operation, a joystick, control panel deck and steering wheel. This allows the trainee to learn the basics of operating farming machinery like tractors and construction machinery such as excavators.



**2022 CONSTRUCTION SIMULATOR PROMO VIDEO**

<https://youtu.be/URWG1WZXDPC>



### SPECIFICATIONS

Simulator Frame:	Custom designed metal frame with safety yellow powder coating Front wheels and rear handle for transportation and lifting Height adjustable seat with real seatbelt Customised full-colour branding (decals) supplied with your company name and logo
Hardware:	Computer has: AMD AM4 Ryzen 5 5600G 6 Core 3.9GHz CPU 8GB RAM (DDR4), RTX3060 12GB Video Card 120GB SSD Hard Drive, Windows 10 operating system 35 inch curved gaming monitor Wireless keyboard with in-built mouse tracker pad Logitech joystick, twin foot pedals and farming machinery control deck All cables + powerboard with surge protection
Software:	The simulator comes with Farming Simulator 22, Excavator Simulator 2022, DIG IT + many other construction and farming programs can be loaded into the PC and configured for operation with this simulator system.

**PLEASE NOTE: The City Car Driving simulation software and the other driver education resources listed in this document are not included**

**PRICING: Australian Buyers: AUD \$16,530.00 inc GST**

**Payment Terms:** We can supply an official quotation once the delivery location is known. This will add delivery, setup and on-site training (as required)

FOR AUSTRALIAN ORDERS:	FOR ALL INTERNATIONAL ORDERS:
<ul style="list-style-type: none"> <li>Purchase Order must be received</li> <li>50% deposit required to confirm order</li> <li>Full payment due within 7 days of delivery</li> </ul>	<ul style="list-style-type: none"> <li>Full payment required to confirm order (this is not negotiable)</li> <li>Credit card payments will not be accepted</li> <li>Supplied fully assembled in wooden crate</li> </ul>



## SDT - 21C BARE FRAME

This option is for a buyer seeking to use other driving simulator software. We provide the 21C model partially enclosed simulator frame in your choice of colour and can install any of the hardware required. The frame is supplied with an adjustable driver's seat, seatbelt, handbrake and our arduino control unit to allow the seatbelt and handbrake to function with the simulator software.

### SPECIFICATIONS

**Simulator Frame:** Powder coated custom designed frame with triple screen mounting  
Can be ordered as Right Hand Drive or Left Hand Drive setup  
Front wheels and rear handle for lifting and movement  
Road car seat, seatbelt and handbrake mechanism all linked to software  
Customised full-colour branding (decals) supplied with your company name and logo  
The buyers chooses the powder coating colour for their simulator frame

**Options:**

#### COMPUTER:

We can source a computer and mount it under the seat  
or your technicians can do this when they receive the bare frame

#### MONITORS:

We can source the required monitors and fit suitable screen mounts  
or your technicians can do this when they receive the bare frame  
(a centre post comes on the bare frame for attaching screen arms to)

#### STEERING WHEEL/PEDALS SYSTEM:

We can source the required steering wheel/pedals and gear lever and fit these  
or your technicians can do this when they receive the bare frame

#### WIRING/CABLES:

We can install the wiring and cables including power board and install the cables in  
through the frame itself

**Software:**

The buyer sources the required driving simulator software

**PLEASE NOTE:** The City Car Driving simulation software and the other driver education resources listed in this document are not included, but can be purchased as add-ons

**PRICING: Australian Buyers: AUD \$9,350.00 inc GST**

**Payment Terms:** We can supply an official quotation once the delivery location is known.  
This will add delivery, setup and on-site training (as required)

FOR AUSTRALIAN ORDERS:	FOR ALL INTERNATIONAL ORDERS:
<ul style="list-style-type: none"> <li>Purchase Order must be received</li> <li>50% deposit required to confirm order</li> <li>Full payment due within 7 days of delivery</li> </ul>	<ul style="list-style-type: none"> <li>Full payment required to confirm order (this is not negotiable)</li> <li>Credit card payments will not be accepted</li> <li>Supplied fully assembled in wooden crate</li> </ul>

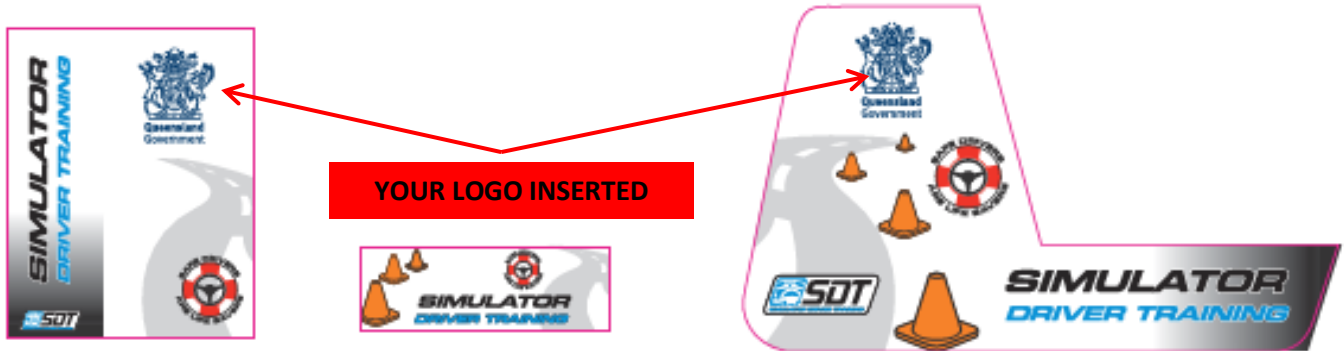




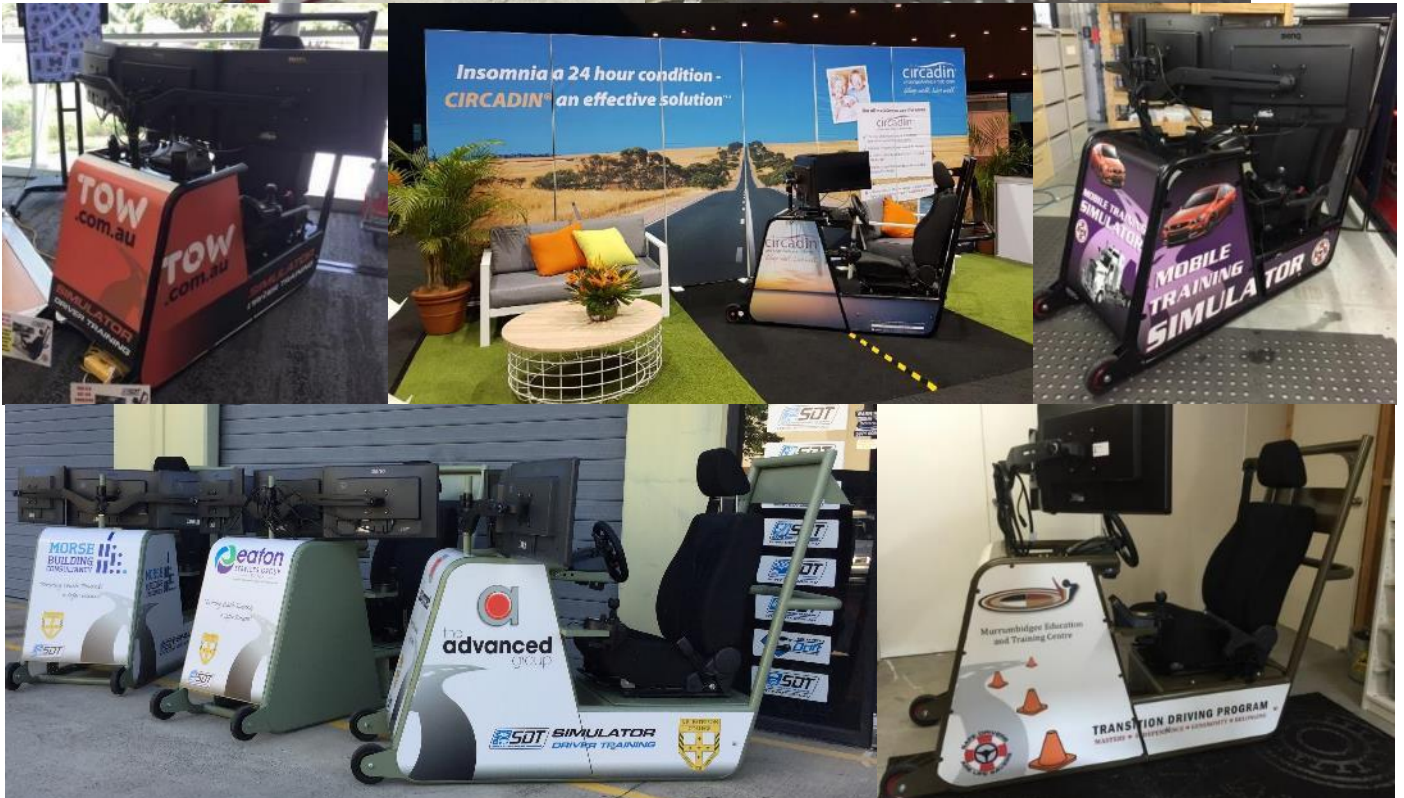
**\*\*\*INCLUDED\*\*\***

## **SDT-21C CUSTOMISED BRANDING**

The buyer of the SDT-21C simulator system can choose the colour of the frame to match their corporate colours and we provide customized branding for the buyer. Your logo is inserted into the simulator decals which are attached to the frame prior to delivery. This means your simulator will promote your business and/or sponsors name and look amazing.



Below are examples of the simulator colours and branding we have created for clients:





## \*\*\*OPTIONAL EXTRA\*\*\* TRAILER FOR SIMULATOR TRANSPORT

We can also supply a fully enclosed custom designed trailer to move your simulator to events.



**OPTION 1:** Enclosed Pantech trailer for transporting the simulator to a location and then unloading the simulator for use



**OPTION 2:** Enclosed Pantech trailer with opening sides for transporting the simulator to a location and then leaving simulator on-board



**Pantech Size:** 2100mm x 1200mm x 1500mm high  
**Structural Capacity:** 900kg  
**Sides & Roof:** 3mm composite aluminium sheeting  
**Floor:** 2.1mm Chequer Plate Flooring  
**Tie Downs:** 4 Recessed Tiedown rings in floor  
**Ramp:** Spring Assisted single person lift  
**Rims:** New 14" Ford stud Sunraysia White  
**Tyres:** 3 x new 185R14 Light Truck (includes spare)  
**Suspension:** 7 leaf slipper spring suspension  
**Lights:** LED's A.D.R. Approved  
**Features:** Spare Wheel, Jockey Wheel, Plug Holder, Mud Flaps  
**Finish:** Zinc rich Primed + two coats of Industrial Enamel. Your choice of colours. External sheeting needs no paint  
**Options:** Sign writing can be arranged, generator fitted for running simulator without access to mains power

**Estimate: AUD\$8,800 inc GST**

Registration and delivery at additional cost



**Pantech Size:** 2100mm x 1200mm x 1500mm high  
**Structural Capacity:** 900kg  
**Sides & Roof:** 3mm composite aluminium sheeting  
**Floor:** 2.1mm Chequer Plate Flooring  
**Tie Downs:** 4 Recessed Tiedown rings in floor  
**All Doors:** Lift up with Gas Struts + 2 locking T-handles  
**Ramps:** Loading ramps stored under the rear  
**Rims:** New 14" Ford stud Sunraysia White  
**Tyres:** 3 x new 185R14 Light Truck (includes spare)  
**Suspension:** 7 leaf slipper spring suspension  
**Lights:** LED's A.D.R. Approved  
**Features:** Spare Wheel, Jockey Wheel, Plug Holder, Mud Flaps, 2 rear stabilizer legs  
**Finish:** Zinc rich Primed + two coats of Industrial Enamel. Your choice of colours. External sheeting needs no paint  
**Options:** Sign writing can be arranged, generator fitted for running simulator without access to mains power

**Estimate: AUD\$9,900 inc GST**

Registration and delivery at additional cost

Trailers have supplied to:

- South Australian Police for high school driver safety programs
- Queensland Police (2 units) for high school driver safety programs (in Cairns and Townsville)
- Tasmania PCYC (Bridgewater) for youth driver safety programs
- Investing in our Youth (Bunbury) for youth driver safety programs
- Drive Wise Program (Mittagong) for youth driver safety programs
- My CPD (Ngukurr Urapunga) for youth driver safety programs
- Changing Lanes (Grafton) for youth driver safety programs





## SOFTWARE ONLY

The multi-user licensed “enterprise version” of **City Car Driving** (version 1.5.9) software can be purchased as a stand-alone option. Buyers can install this software into their own PC-based driving simulator. **Use of the Home version in commercial driving simulators is prohibited.**

**City Car Driving** is a driving simulator program, using advanced car physics to achieve a realistic car feeling and a high-quality render engine for graphical realism. Cars, roads, traffic and pedestrians are created as to make users feel they're driving a real car in a real city. Watch our promotional video below:



**WHAT UNIQUE THINGS CAN A SIMULATOR TRAIN FOR?**

[https://youtu.be/4i\\_jCJhb-j4](https://youtu.be/4i_jCJhb-j4)

- There is now a **ride-sharing passenger transportation** feature – complete with customer reviews. The more passengers are satisfied, the more fuel you'll get available on your fuel card!
- You can fit a **trailer** and practice in the learner driving centre (parking, slalom etc) and also use the trailer in the free driving mode around the virtual city in different weather and traffic conditions.
- Freight delivery with a trailer, allows you to make deliveries while towing a large trailer
- Added **vehicle problems** that can be engaged to cause mechanical problems like engine overheating, brake failure, steering problems, tyre puncture and run out of fuel.
- Added **drunk driving mode**, which then simulates the blurred vision and lack of coordination that comes from high range drunk driving. In this mode it is very difficult not to crash.
- Added support of head-mounted **HTC Vive**, **Oculus Rift** and **Track IR** Headgear
- **New defensive driving exercises** at a special training complex, this includes emergency lane change, emergency braking, fast slalom, reversing tests, high speed cornering and random lane change (like the elk or kangaroo swerving test)
- Added a new **function of record/playback**. It makes it possible to record a driving session in a file that can be played back for review. During the playback the instructor can switch the camera view angles to review the situation. This feature is useful for better analysis with the student.
- A 4WD vehicle is added (left hand drive) with the ability to engage 4H or 4L for off-road simulation
- Added a new dangerous situation - **sudden pedestrians**! If this function is activated **pedestrians** can **suddenly cross the road** in random places. Tests the drivers hazard perception and reactions.
- Added a new dangerous situation – **traffic accident**! Resulting in hazardous situations with a traffic crash suddenly occurring in the traffic ahead.
- Improved **winter mode** with not only falling snow and snow textures, but also physically with reduced co-efficient of friction (slippery/less grip)

Recommended system configuration:

- **Operating System:** Windows 10
- **CPU:** Intel Core i# 3.2 GHz / AMD FX 4xxx 3.6 GHz
- **Video:** AMD Radeon R7 250X / nVidia GeForce GTX 750
- **RAM:** 8 Gb DDR3 RAM; **HDD:** 10 Gb of free space;
- **Screen:** 1920x1080, 32 bit; **Sound:** compatible with DirectX 9.0;
- **Other:** keyboard, mouse, Logitech G29 or G920 steering wheel



### PRICING:

**Australian Buyers**

**Upgrade\* to Version 1.5.9**

**Upgrade\* to Motion/Telemetry**

**AUD \$4,290.00 inc GST**

**AUD \$220.00 inc GST**

**AUD \$2,200.00 inc GST**

\* Upgrade requires a previous “enterprise” version of City Car Driving with the security HASP key



## CITY CAR DRIVING SOFTWARE

SDT is the exclusive distributor for City Car Driving Software in many Asia-Pacific countries.

**Our simulators are loaded with an authorized multi-user licenced “enterprise version” of the software. This ensures your investment is protected by not using illegal home-user licensed software when using the simulator for commercial driver training.**



### The software has the following features:

**LANGUAGES:** The software can be set into the following languages: English, German, French, Italian, Spanish, Portuguese, Japanese, Turkish, Czech, Chinese, Danish, Finnish, Polish, Russian, Ukrainian and Kazakh. *(a Bahasa Malay language version is available for an extra cost)*

**INTERNATIONAL OPTIMISATION:** When a driver starts they can choose which international mode they wish to attempt for that session, this allows practice with Left-hand drive or Right-hand drive traffic and experience with the road signage of that region.

- **AUSTRALIAN MODE:** If Australia is chosen the software includes Australian road signage and Australian-made Holden Commodore (VE model) and Ford Falcon (BF Utility) with realistic simulation of the in-cabin layout of both vehicles. Police and Ambulance vehicles show the 000 emergency phone number and vehicles have Australian style number plates.
- **USA MODE:** In addition to the traffic rules changed: road signs, markings, traffic lights, as well as virtual **speedometer** (shows speed in MPH).
- **CANADA MODE:** local road signs and markings, road rules, turn on red traffic lights
- **EUROPEAN MODE:** EU style road signs, markings, design of traffic lights.

Please note: All driving is done in the same virtual city and environment (same road networks, buildings, trees, signs) just the road rules, road markings and vehicles change to suit which countries mode is selected. Therefore you are not driving in any specific country (USA or Australia) but if someone is planning to travel to another country they can get driving experience with local road signage and experience of driving on the other side of the road.

**SETTINGS MODE:** The instructor can alter the graphics specifications (shadows, rendering, reflections, brightness and contrast), sounds can be turned on or off and the volume adjusted.

The Simulator comes with a wireless keyboard and the gear lever and steering wheel have buttons which can be programmed to perform vehicle control tasks like indicators, headlights, high beam, windscreen wipers and horn. Using the settings mode every control feature can be programmed to different buttons and keyboard keys. The calibration and sensitivity of the steering wheel, accelerator, brake and clutch pedal can also be adjusted.

The Simulator frame has a road car seat that can be adjusted for height, recline angle and reach (moved in and out). On the SDT-183 frame the pedals and steering wheel tray can be moved in or out to provide a better position for the short or tall driver.



**STUDENT RECORDS:** Each user of the simulator can have their own profile with the simulator controls set to their preferences and records kept of all driving sessions including infringements. This can be used to record progress, measure improvements but also to monitor if students are deliberately driving badly when not being watched by the instructor.

EVENT	PENALTY	TIME FROM SESSION START
Hindrance to the vehicle moving in the same direction.	5 pts.	0:17:20
You are driving more than 80 kph over the speed limit.	Licence revocation	0:17:21
Right turn signal not used when changing the lanes.	3 pts.	0:17:23
Right turn signal not used when changing the lanes.	3 pts.	0:17:28
Right turn signal not used when changing the lanes.	3 pts.	0:17:30
Rolling off the road without turning on the right signal.	3 pts.	0:17:31
You've pulled over the roadway.	5 pts.	0:17:31
You are driving more than 20 kph over the speed limit.	3 pts.	0:17:32
You are driving more than 40 kph over the speed limit.	5 pts.	0:17:32
You are driving more than 60 kph over the speed limit.	Licence revocation	0:17:32
You are driving more than 80 kph over the speed limit.	Licence revocation	0:17:32
You are driving more than 20 kph over the speed limit.	3 pts.	0:17:32
You are driving more than 40 kph over the speed limit.	5 pts.	0:17:32
You are driving more than 60 kph over the speed limit.	Licence revocation	0:17:32
You are driving more than 80 kph over the speed limit.	Licence revocation	0:17:32
You've had an accident.	Traffic accident	0:17:32
+ 15.07.2016 - Free driving	649 pts.	
+ 15.07.2016 - Free driving	0 pts.	
+ 15.07.2016 - Free driving	121 pts.	
+ 15.07.2016 - Free driving	222 pts.	

**VEHICLES:** The student can choose from a range of passenger, SUV and light commercial vehicles. They can also choose the vehicle colour. Each vehicle has an authentic dashboard layout, acceleration, braking capability, handling dynamics and engine sound. The chosen vehicle can be driven as an automatic, clutch-less manual, manual gearbox with paddle shift or manual gearbox with H-pattern gearbox. ABS can be switched on or off.



Unlike many driving simulators, City Car Driving has an **advanced physics engine** providing a high realism of driving. Maximum speed corresponds to the real vehicle and a mathematical model of each engine simulates: friction force, inertia and the realistic work of the starter and many other parameters. **Brake lockup, understeer skids, oversteer slides, spins and handbrake slides are all possible.**

*OPTIONAL EXTRA: We can create additional vehicles (specific to your country) and install them into the software. This can include semi-trailers for truck training and allow authentic looking police vehicles, taxi's and local makes or models that people in your country are used to seeing or driving.*



**DRIVING WORLD:** The software has a large virtual city that provides a huge driving area and includes roads, crossings and junctions of various types and complexity, that help get confidence on the road in any situation. It gives users the opportunity to drive from one district of the city to other without extra loading screens.

- **Learn-to-Drive Test Track:** with slalom, parking, u-turn, steering and cornering drills
- **Old District:** narrow streets, unsupervised crossings
- **Modern District:** wide streets, many multilane roads, signalled and unsupervised crossings
- **Superhighway:** with freeway on-ramps, off-ramps, higher travel speeds
- **Country Road:** with merging of 2 lanes into 1 and narrow roads
- **Gravel Road:** with bumps, obstacles and reduced traction (grass can be driven on)
- **Southern District:** wide streets with tramways, signalled and unsupervised crosswalks, narrow tangled courtyards with many parked cars
- **Mountainous Area:** narrow roads with steep hills and elevation changes, includes 4WD track across steep and slippery terrain
- **NEW Defensive Driving:** emergency driving scenarios (braking, lane change, slalom)
- **NEW IN 2025:** there is a new version of this software coming in 2025. It will feature improved driving experiences, dynamic traffic and weather and upgraded graphics

An interactive detailed city map will help you to not get lost in a big virtual world. There are also navigation tips while driving along each route.

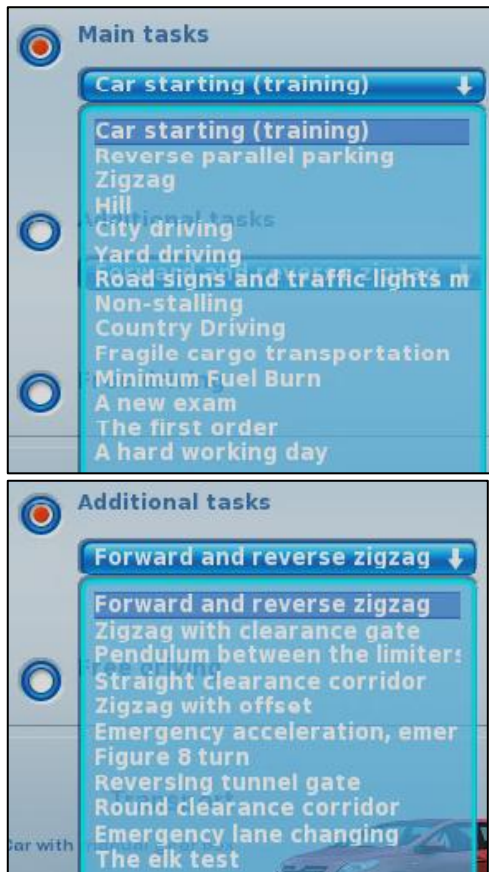


**Support for both right-handed and left-handed driving modes** allows you drive not only under the usual traffic rules, adopted in most countries of the world - on the right side of the road, but also under the rules used for the driving on the left side of the road, as it is in Australia, Japan, UK and some other countries. This feature makes this driving simulator a versatile tool, regardless of the country which the user resides in. This also allows users to practice their driving before travelling to a location with different traffic orientation.

**Smart traffic “AI”** ensures that cars are physical, they're able to collide with the user's car or with each other. Traffic density and its "aggression" can be adjusted in the game settings.







**MAIN TASKS:** There is a range of driving tasks or missions for the student driver to accomplish, each testing specific skills (time management, fuel efficiency etc). Students need to complete a task before the next one is accessible:

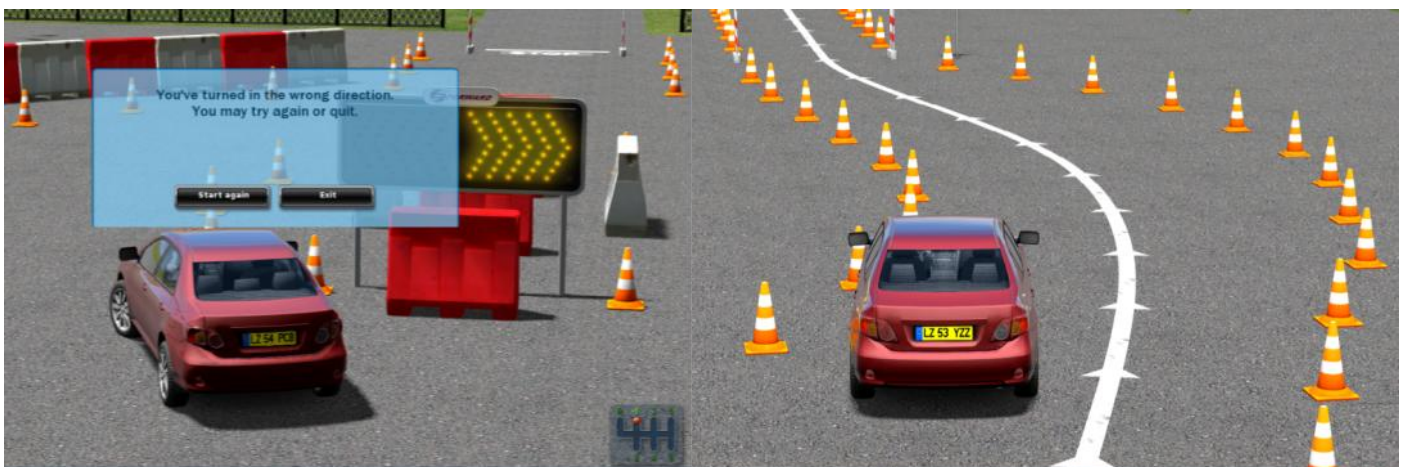
Car Starting	Reverse Parallel Parking
Zig-Zag Test	Driving on Hilly Terrain
City Driving	Yard Driving
Obeying Road Signs	Non-Stalling
Country Driving	Moving Fragile Cargo
Fuel Efficient Driving	A Driving Test
Delivering an order	Hard working day

### ADDITIONAL TASKS: (DEFENSIVE DRIVING)

There is a selection of defensive driving tasks to test reactions and vehicle control skills at the driver training area.

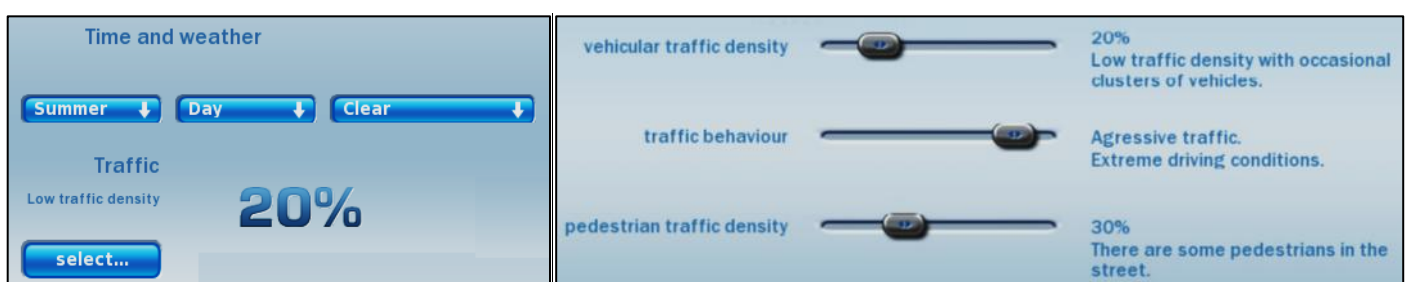


This includes emergency lane change, emergency braking, fast slalom, reversing tests, high speed cornering, standard lane change and random "left or right" lane change (ie. elk/kangaroo test)



**ENVIRONMENT:** The driving environment is fully controllable with adjustments possible for Day/Night/Sun/Rain/Fog/Snow, Traffic Density, Traffic Behaviour (Calm or Aggressive). The instructor can make the roads full of traffic like peak-hour or adjust down to light traffic volumes.

The new **winter mode** has not only falling snow and snow textures, but also physical changes with a reduced co-efficient of friction (slippery/less grip)



**EMERGENCY SCENARIOS:** The software can generate sudden emergency events such as:

- a car cuts into the lane just in front of your car or the car in front brakes suddenly
- a vehicle drives across the centre lines into your lane (head-on crash scenario)
- pedestrians cross the road in wrong places
- a road accident happens randomly between other vehicles



**VEHICLE PROBLEMS:** The software can now generate problems with the vehicle.

- |                        |                        |
|------------------------|------------------------|
| ✓ Lighting Problem     | ✓ Steering Malfunction |
| ✓ Brake System Failure | ✓ Coolant Overheating  |
| ✓ Fuel Leakage         | ✓ Tyre Puncture        |

These hazards can be set to happen occasionally or very frequently. This can be used to test a driver's alertness and reactions to mechanical problems.



**OTHER FEATURES:**

- **Record/playback function** makes it possible to record a driving session in a file that can be played back for review. During the playback the instructor can switch the camera view angles to review the situation. This feature is useful for better analysis with the student.
- **Accurate traffic rules** helps students to examine each road situation. And the **virtual instructor** provides on-screen feedback while driving.
- **Pedestrians** look alive and behave accordingly, sometimes crossing the road in the wrong places. The virtual city has lots of supervised and unsupervised crosswalks used by pedestrians.
- **High-quality graphics** is confirmed by the screenshots. Cars have shadows, highlights, reflections. Roads become wet and greasy after rain. Dust comes off wheels. The road surface is very realistic.
- **Sound effects** are realistic and improve immersing in the driving process. There are such effects as the sound of police sirens, slipping wheels in skids and horn blasts from impatient drivers.
- **Damage.** All cars get visible damage, when impacts occur. However there is no graphic content to discourage students from trying to cause spectacular impacts (for example pedestrians are run over, but no graphic detail is shown)



► **Ride-share Training:** There is now a ride-sharing passenger transportation feature – complete with customer reviews. The more passengers are satisfied, the more fuel you'll get on your fuel card!



► **Trailer Towing:** You can fit a trailer and practice in the learner driving centre (parking, slalom etc) and also use the trailer in the free driving mode around the virtual city in different weather and traffic conditions. There is a new exercise for a passenger car with a trailer. Using an app on the game phone (VR tablet), you can choose to start completing goods transportation orders. A loader will be waiting for you at the freight depot to give you the goods, and the route will guide you to the unloading point. Your progress depends on how well you transport goods. As you successfully complete deliveries, you will be entrusted with fragile goods, or even with unloading one batch in two different locations across the city.



► **Fuel Consumption:** In the free driving mode, service stations are now usable. Fuel consumption level depends on the style of driving. The navigator automatically routes you to the nearest refueling station when you have low fuel. And of course the fuel usage mode can be turned off if not required.





## STEERING WHEEL, GEAR LEVER AND PEDAL SYSTEM



SDT simulators use either the **Logitech G920** or **Thrustmaster GT** steering wheel, pedals and gear lever. These control units have been chosen to keep the costs down and allow for easy replacement if something goes wrong after years of simulator use. The steering wheel diameter is smaller than a real car but this ensures students develop good steering techniques. The instrument panel of the vehicle being driven is shown on-screen.

[CLICK TO WATCH VIDEO ABOUT STEERING WHEEL](#)



### Leather steering wheel

The steering is covered in high-quality, hand-stitched leather, with the look and feel of a high-performance car steering wheel and it gives a comfortable but durable experience. Powerful dual-motor force feedback realistically simulates force effects for precision response. Solid steel ball bearings in the wheel shaft and stainless-steel paddle shifters and pedals make the G920 very robust and hard wearing.



### 900° Steering

The 900-degree lock-to-lock rotation of the G920 Driving Force means you can turn the wheel around two and a half times. It's the same degree of motion as a steering wheel inside a car. The steering wheel top stripe is a visual indicator of which direction the wheel is pointing.



### Responsive Pedal Unit

Maintain a more realistic driving body position with the separate floor pedal unit with integrated throttle, brake, and clutch pedals. G920 Driving Force lets you comfortably accelerate, brake and change gears with the feel of an actual car. The nonlinear brake pedal mimics the performance of a pressure-sensitive brake system for a more responsive, accurate braking feel.



## \*\*\*OPTIONAL EXTRAS\*\*\* CUSTOMISING THE CONTROLS

The following modifications are possible

- ✓ A larger (30 cm) diameter steering wheel
- ✓ A truck style gear lever can be added
- ✓ An automatic only gear lever
- ✓ A button box with ignition key and buttons to control vehicle systems can be added

If the simulator is being used with disabled drivers, the following modifications are possible

- ✓ A hand controller steering knob can be attached to the steering wheel
- ✓ A lever can be added to control acceleration by hand







# WHAT DRIVER EDUCATION RESOURCES ARE INCLUDED?

Since SDT is a driver training company, we support the end users of our simulators with a range of additional driver education resources and training aids. The following video outlines what is included:



**WHAT RESOURCES COME WITH A SIMULATOR**

<https://youtu.be/Wtx4bVaH8e4>

ITEM	DESCRIPTION	21A MODEL	21B MODEL	21C MODEL
	<b>Defensive Driving Handbook</b> This 24-page full colour booklet on Defensive Driving summarizes the essential concepts of Safe and Defensive Driving. Use the booklet as a handout to your course participants or keep in your driver education resource library.	 10 books supplied	 25 books supplied	 25 books supplied
	<b>Driver Assessment Sheet</b> We have developed a comprehensive driver assessment sheet to allow simulator operators to assess drivers and give feedback on their driving techniques such as seating position, steering, use of vehicle controls, general driving and defensive driving to avoid risky situations.	 YES supplied	 YES supplied	 YES supplied
	<b>Alco-cup Standard Drink Cup</b> Alco-cups demonstrate the quantity of alcohol that makes a standard drink for different types of beer, wine and spirits. These are useful tools for educating drivers about responsible drinking strategies.	 2 cups supplied	 2 cups supplied	 5 cups supplied
	<b>Eye Sight Chart</b> With transport departments no longer conducting eye-sight testing for licence renewal and with increasing numbers of Diabetics (suffering impaired vision), it is important to test driver's eyesight. Therefore this eyesight chart is a useful tool to accompany driver training with the simulator.	 1 chart supplied	 1 chart supplied	 1 chart supplied
	<b>Distract-A-Match Game</b> This unique shape matching game helps demonstrate in a fun and engaging way the impact of distractions on our reaction time and judgment. This tool provides a clear and easy to understand lesson about the impact distractions have on a person's ability to drive safely.	CAN BE ADDED TO YOUR ORDER	 1 game supplied	 1 game supplied
	<b>Fatal Vision Alcohol Goggles</b> These unique goggles demonstrate the impairment of alcohol on a person's vision and co-ordination. The goggles can be used for a walk-the-line sobriety test or used with a driving simulator for a unique anti-drunk driving demonstration. The goggles are available in different BAC levels which allow a person to experience different levels of alcohol impairment (eg. the effect of being at the legal limit compared to several times over the limit).	 1 goggle supplied	 1 goggle supplied	 2 goggles supplied
	<b>Driver Safety Posters</b> These 2 x A2 laminated posters have been developed by SDT to provide informative driving tips to the audience around and using the driving simulator. The posters cover the topics of carjacking/security and driving vision.	CAN BE ADDED TO YOUR ORDER	 2 posters supplied	 2 posters supplied

Safe Drive Training is the exclusive distributor for Fatal Vision Impairment Goggles:



# IMPAIRMENT GOGGLES

## MARIJUANA



The **Marijuana Goggle** is the perfect training tool to start discussions about recreational drug use. It has a colour filter and causes disorientation with the wearer. This goggle needs to be used with the additional resources in the training kit.



The Marijuana Goggles when used with the training kit activities, deliver a memorable lesson about the impact of marijuana impairment to help you address such topics as impaired driving and substance abuse.

The **Danger in Every Step (D.I.E.S.)** floormat compliments the use of any of the Fatal Vision Impairment Goggles.



## ALCOHOL



The **Alcohol Goggles** deliver memorable lessons on topics like impaired driving, underage drinking and other substance abuse issues. There are 5 different levels of impairment, allowing the participant to experience low impairment through to high levels of intoxication. There are also clear lenses for simulating daytime impairment and tinted lenses for nighttime impairment.

- **WHITE:** (estimated B.A.C. of < .06)
- **BRONZE:** (estimated B.A.C. of .07 - .10)
- **RED:** (estimated B.A.C. of .12 - .15)
- **SILVER:** (estimated B.A.C. of .17 - .20)
- **BLACK:** (estimated B.A.C. of > .25+)



**Tunnel Vision Lenses (TVL)** are an add-on resource that can be used with the Alcohol Goggles. The TVL create the tunnel vision effect of alcohol impairment on peripheral vision and allow users to experience the potential consequences on their driving.



**Alcohol Education Training Kits** are available which include goggles + other resources and educational games to help the trainer to deliver better lessons.

## CONCUSSION



The **Concussion Goggle** is an awareness tool that is specifically constructed to simulate the potentially debilitating effects of a traumatic brain injury (TBI). These goggles are being used to deliver programs to sporting teams, schools and community organisations about concussions, helmet and seat belt safety. Participants will experience simulated TBI symptoms such as dizziness, visual disconnect, disorientation, hesitation, apprehension, confusion, and lack of confidence when trying to perform simple activities while wearing the goggles.



**Concussion Training Kits** are available which include resources and educational games to help the trainer to deliver better lessons.







## \*\*\*OPTIONAL EXTRAS\*\*\* DRIVER EDUCATION RESOURCES

The following driver education resources are available to add to your order:



[Click Here For More Info](#)

### **Marijuana Simulation Experience:**

This training kit includes a goggle and other educational games to simulate the impairment of Marijuana. The kit also includes a USB containing a range of drug education resources and an Australian-made interactive hazard perception video that is watched while wearing the Marijuana Goggle.

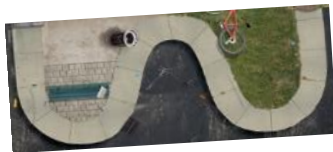


[Click Here For More Info](#)

### **Drowsy and Distracted Driving Goggles:**

These unique "blinking" goggles simulate the experience of drowsy driving [like micro sleeps] and distracted driving. Using the App, the instructor can control the blinking rate of the goggles. These are a perfect accompaniment to a driving simulator and any driver education program that targets fatigue or distracted driving.

[< CLICK TO WATCH TRAINING VIDEO ON THIS PRODUCT >](#)



[Click Here For More Info](#)

### **D.I.E.S. Danger in Every Step Floor mat:**

This specially designed 3D printed floor mat is used in conjunction with any of the Fatal Vision Goggles to provide an interactive demonstration of the dangers of alcohol and drug impairment (e.g. walking along the footpath, tripping over obstacles etc). Size is 1.2 metres x 3 metres



### **Alcohol Education PowerPoint:**

This is a comprehensive PowerPoint covering the impact of alcohol on human reactions, driving performance and drunk driving prevention strategies. The content is made in Australia with Australian content and terminology.



[Click Here For More Info](#)

### **Redline Disposable Alcohol Testers:**

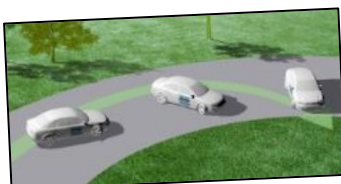
REDLINE is a simple to use alcohol breathalyser, which detects the presence of alcohol in the body and gives an accurate indication of whether the blood alcohol content has exceeded a specific limit. Use this for testing students suspected of consuming alcohol or as a unique course give-away.



[Click Here For More Info](#)

### **Concussion Training Kit:**

The full training kit is a hands-on awareness program allowing participants to experience the simulated TBI (Traumatic Brain Injury) symptoms of dizziness, visual disconnect, disorientation, hesitation and confusion. The kit includes information for the trainer to run a session, games for participants, assessments and hand-out materials.



### **Skid Control Posters & Training Video**

The City Car Driving simulation software has a realistic physics engine, allowing for slides and spins to occur (especially in rain, ice or snow conditions). These 3 x A2 laminated colour posters allow driving instructors to discuss understeer, oversteer and spins. A comprehensive driver training video on Skid Awareness is also included.



### **Defensive Driving PowerPoint:**

This comprehensive PowerPoint presentation (300+ slides) addresses the dangers of driving and risk management strategies for safe driving. The presentation contains numerous images and video clips to reinforce the principles being explained.

*(supplied on USB as PowerPoint file)*



## **ADDITIONAL SOFTWARE & VIDEOS THE FOLLOWING IS ALL INCLUDED**

When you purchase any SDT driving simulator you will also receive the following additional driver training resources to assist with your road safety programs:

- **ROAD RULE TEST:** There is a 20 question road rule test for students to complete. Once they complete the test, the correct answers are shown and additional explanations provided.
- **3 x DRIVING KNOWLEDGE TESTS:** There are 3 x 20 question general knowledge tests about the basics of safe driving. Once the student completes the test, the correct answers are shown.
- **SOFTWARE MANUAL:** There is an electronic version of the City Car Driving user's manual
- **SAFE DRIVING VIDEOS:** There are 22 exclusive driver training videos that provide almost 1 hour of additional safe driving content for novice drivers to view. This can be watched by the simulator user or shown to a larger group via the monitor screens. Topics covered are:

- ✓ **Seating Positions**
- ✓ **Safe Following Distance**
- ✓ **Share the Road with Bicycles**
- ✓ **Speed vs Mass when Braking**
- ✓ **Seatbelts**
- ✓ **Steering Techniques**
- ✓ **Share the Road with Trucks**
- ✓ **City Driving Tips**
- ✓ **Roundabouts**
- ✓ **Carjacking Safety**
- ✓ **Road Lines**

- Changing Gears in a Manual**
- Mirror Adjustment**
- Fuel Economy Tips**
- Lane Position**
- Night Driving**
- Steering Techniques**
- Suspension Testing a vehicle**
- Crash Testing**
- Traffic Light Tips**
- Tyre Maintenance**
- Speeding "gets you nowhere faster"**



**The Trinidad and Tobago Automobile Association is a proud owner of 2 driving simulators**





**\*\*\*OPTIONAL\*\*\***

## **ON-SITE INDUCTION/HAND-OVER**

If SDT is delivering the simulator to your venue we will unpack, setup and our instructor can conduct on-site induction training for your personnel. The induction training covers:

- ✓ Setup of simulator (fitting and removing screens, adjusting frame, troubleshooting)
- ✓ Review of simulator features
- ✓ Operation of simulator software
- ✓ Maintenance procedures
- ✓ Practice delivering a simulator training session
- ✓ Training on the additional software and training resources

The induction training usually takes 3 hours and is done on the same day as the simulator is delivered and hand-over occurs. Ideally this session is limited to a maximum of 6 participants.

Some overseas buyers have elected to have the simulator freighted directly to them and not receive any on-site training. In this case, SDT will provide comprehensive instructions and telephone and video support to assist the buyer to unpack and setup the simulator. The following are some of our "how to" and help videos for our simulator owners:

	<b>TROUBLESHOOTING FIXES FOR 21C SIMULATOR</b>	<a href="https://youtu.be/dBRLCASqEA8">https://youtu.be/dBRLCASqEA8</a>
	<b>HOW DO I? FREQUENTLY ASKED QUESTIONS</b>	<a href="https://youtu.be/NxjeHq6HEOs">https://youtu.be/NxjeHq6HEOs</a>
	<b>ADJUSTING THE SOUND IN YOUR SIMULATOR</b>	<a href="https://youtu.be/IJj9CXDRUIY">https://youtu.be/IJj9CXDRUIY</a>
	<b>HOW TO SET THE CONTROLS IN THE SIMULATOR</b>	<a href="https://youtu.be/qfr0QGSiEYQ">https://youtu.be/qfr0QGSiEYQ</a>
	<b>HOW TO MOVE YOUR SIMULATOR</b>	<a href="https://youtu.be/DQ52RnQF-Eg">https://youtu.be/DQ52RnQF-Eg</a>
	<b>HOW DOES THE PARK BRAKE AND SEATBELT WORK</b>	<a href="https://youtu.be/bGRTYJi5Fy8">https://youtu.be/bGRTYJi5Fy8</a>
	<b>FIXING THE STEERING WHEEL AND PEDALS</b>	<a href="https://youtu.be/H8bNoEzpzB0">https://youtu.be/H8bNoEzpzB0</a>



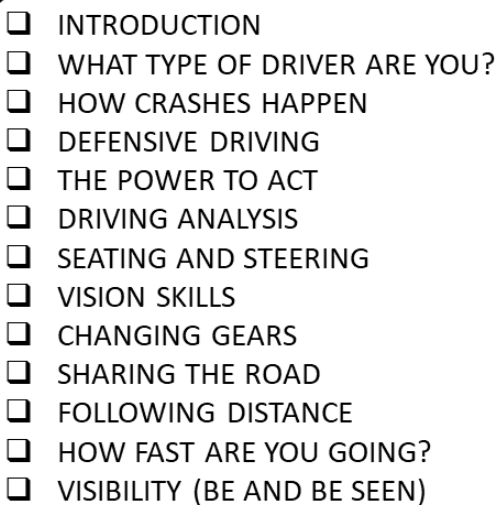


**ADOB**  
ADVANCED DRIVER ON-BOARD

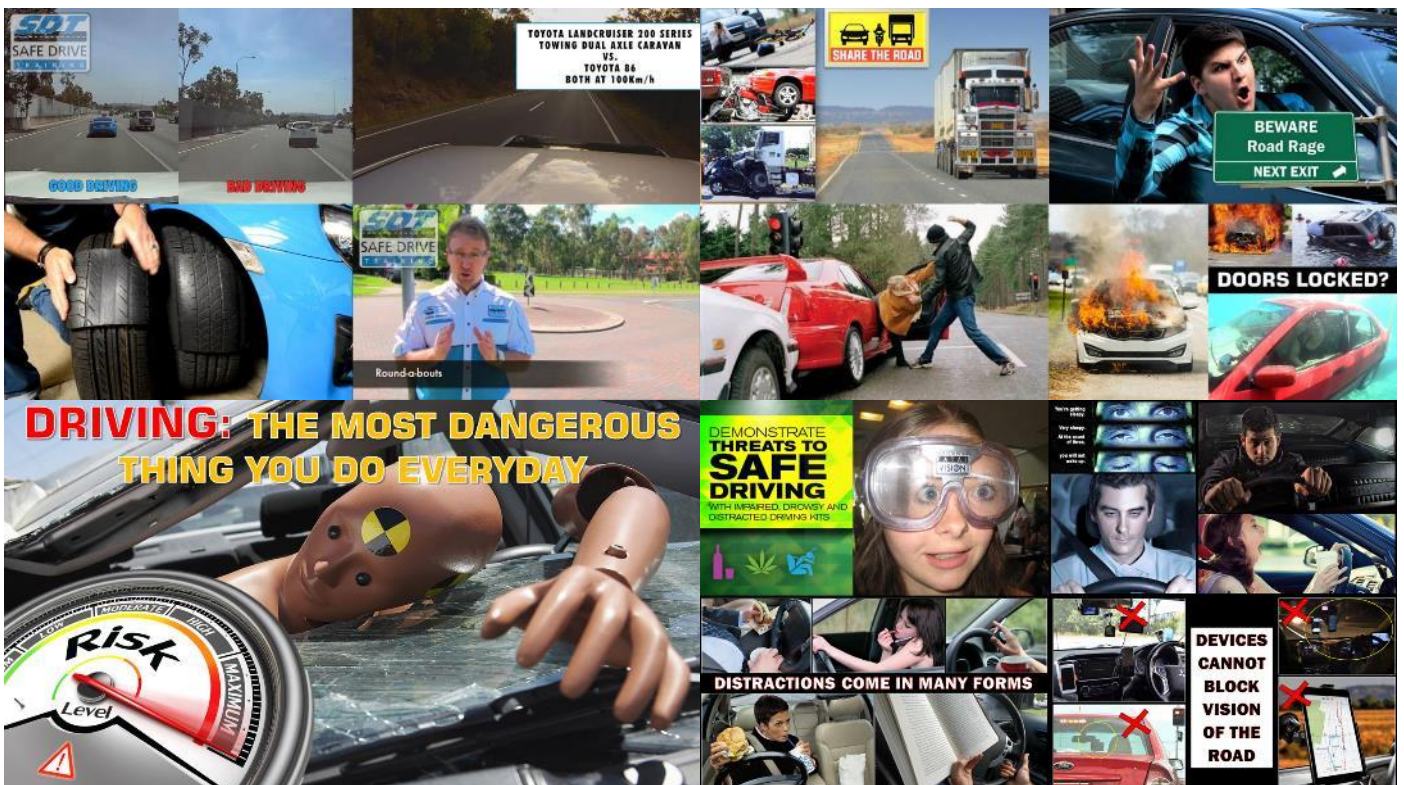
# SAFE DRIVE

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## E-LEARNING



- ☐ EMERGENCY BRAKING
- ☐ VEHICLE DYNAMICS
- ☐ ENGINE CHECKS
- ☐ TYRE SAFETY
- ☐ VEHICLE BREAKDOWNS
- ☐ VEHICLE SECURITY
- ☐ IMPAIRMENTS
- ☐ VEHICLE LOADING
- ☐ CITY DRIVING
- ☐ COUNTRY ROADS
- ☐ RISK vs. REWARD
- ☐ STEERING TO AVOID CRASHES
- ☐ HOW TO CRASH







## WHY SIMULATORS?

The following promotional video demonstrates the unique things a simulator can train for:



**WHAT UNIQUE THINGS CAN A SIMULATOR TRAIN FOR?**

[https://youtu.be/4i\\_jCJhb-j4](https://youtu.be/4i_jCJhb-j4)

Simulators are ideal for basic introductory training to the concepts of driving and for demonstrating the ramifications of risk taking behavior. **This simulator is not designed to replace real-world driving experience.** Research shows students get their driver's licence faster when simulators are used. (research shows 1 hour in a simulator in the early learner phase is equivalent to 3 hours of on-road driving). Some scientific studies (performed in the USA) have shown that when a good simulator is used, accident rates during the two year period after getting the license, is reduced to 34% of the national average accident rate of novice drivers. The better quality of the simulator and the curriculum the larger the resulting benefits.

### Simulators can teach:

- *Starting Procedures (seating and steering techniques, engaging gears, using the handbrake)*
- *Correct use of pedals*
- *Gear Changing (H-pattern gear selector, automatic transmissions and paddle-shift)*
- *Hillstart Procedure (using the handbrake fitted)*
- *Brake Application (software allows ABS on or off and roads to be made slippery)*
- *Steering Techniques*
- *Procedures for driving (system of car control, lane position, changing lanes, leaving a parking spot, merging, roundabouts, dealing with traffic, cornering)*
- *Scanning and Hazard Perception*
- *Vision through corners (especially with a triple screen simulator)*



### Simulators can demonstrate the consequences of:

- *Tailgating and aggressive drivers*
- *Not following procedures (like not shoulder checking when changing lanes)*
- *Speeding and inappropriate speed for the conditions (fog, rain, heavy traffic)*
- *Variable Conditions (wet roads, fog, unsealed roads)*
- *Disobeying Road Rules*
- *Distracted Driving (get the student to use mobile phone or other source of distraction)*
- *Divided Attention Failure (ask students to multi-task with mental load whilst driving)*
- *Reaching for an item (ask students to pickup an item from under or behind the seat)*
- *Alcohol Impairment (using the Fatal Vision "Beer" Goggles supplied)*
- *Marijuana Impairment (using the Marijuana Simulation Goggle and software)*
- *Concentration required for safe driving*
- *Fatigue or zoning out (get the student to drive along the motorway for 10 minutes)*

SDT is a driver training company that sells simulators, as such we can openly advise on the limitations of simulator training. **Some simulator manufacturers will falsely promise that simulators will replace up to 90% of real-world driving. We don't believe in this claim.**



## ***BUSINESS CASE FOR SIMULATORS***

Using simulators, both High Schools and Training Institutes can be involved in the driver education of novice drivers from pre-learner upwards. This means driver training can be taught at schools from a younger age (14 years old+) to prepare teenagers for their future driving. This can develop the skills and attitudes to driving over a longer period, compared with the current rush to get a license during busy final school years and exam loads.

- ✓ Schools can impose a simulator usage fee to recoup investment and allow future driver training investments.
- ✓ Driving schools using simulators can separate themselves from their competitors and offer clients unique training courses involving a mixture of simulator and real-world driving experience
- ✓ Simulators are attractive to “generation Z” who are the most computer literate generation.
- ✓ Simulators are real driver training devices, as opposed to “car racing games” that don’t reflect real life consequences and crash damage.
- ✓ Students start learning basic vehicle control and road awareness **EVEN BEFORE** they have their Leaners Permit.
- ✓ Training is conducted in a safe environment without the stress of mechanical damage or crashing, allowing students to focus on the skills being taught and therefore enhancing learning outcomes.
- ✓ It makes it possible to teach the student to cope with dangerous situations that do not occur frequently on the road.
- ✓ Students can identify and practice driving activities they are struggling with such as roundabouts, merging or heavy traffic.
- ✓ The simulator has the ability to be paused and/or participants can make new attempts at a scenario to enable constructive discussion.
- ✓ Training is delivered in an interactive environment, where students can make mistakes and learn from them in total safety.
- ✓ Head tracking (optional) creates a fully immersive environment that allows for shoulder checks and creates better spatial awareness.
- ✓ The triple screen technology on the simulator is so real once students are driving, they often lean forward to look around objects – this is developing both their observation skills, and their vehicle control skills.
- ✓ Fewer hours on the road: reduces fuel consumption which is good for the environment: one hour in the simulator gives a CO2 emission which is 13x less than one hour in a car.
- ✓ The SDT simulator requires no mechanical servicing, registration, insurance and there’s no fuel cost, tyre or brake wear.
- ✓ High quality training in less time and at lower cost.







## ***NEGATIVE VIEWS OF SIMULATORS***

We regularly encounter people with a negative view of driving simulators. Generally this person has conducted little or no research but they have formed an opinion that simulators are gaming machines, with the purpose of crashing cars or car racing. This person, often was born before 1980 and has therefore seen coin operated “arcade gaming” and home entertainment systems (Atari, C64, Nintendo, Gameboy) and thinks driving simulators are still designed for these entertainment purposes. They also have life experience with older motor vehicles and therefore don't realise the technology, systems and screens in a modern vehicle are very much like computers.

Such a person needs to be enlightened that

- a) The airline industry use simulators for compulsory pilot training (the simulator allowing emergency situations to be experienced and learnt from in safety)
- b) The military use simulators for training pilots, tank crews and soldiers
- c) The medical profession use simulators for training doctors and nurses
- d) Immersive simulation is now used for training mental health and care workers, allowing them to experience simulations of domestic violence
- e) Train drivers learn in simulators
- f) Elite “real world” motorsport drivers use simulators to learn track layouts and stay current with their hand eye coordination skills
- g) There are online simulator racing categories that require the skills of “real world” racing without the risk, pollution and expense of competing in real motorsport. Millions of people are involved.



**SIMULATORS HAVE BEEN USED FOR 50 YEARS**



**THE MODERN VEHICLE IS LIKE A COMPUTER**



## **REVIEW OF OTHER SIMULATORS**

Before commencing our simulator business, SDT did a thorough review of the driving simulator market and this showed us the deficiencies in some simulator systems or software.

Some software has very poor Physics simulation, which does not accurately model a vehicles handling such as braking and cornering forces. When test driving a simulator we encourage you to try and spin out the car and see if how the software models and replicates this.

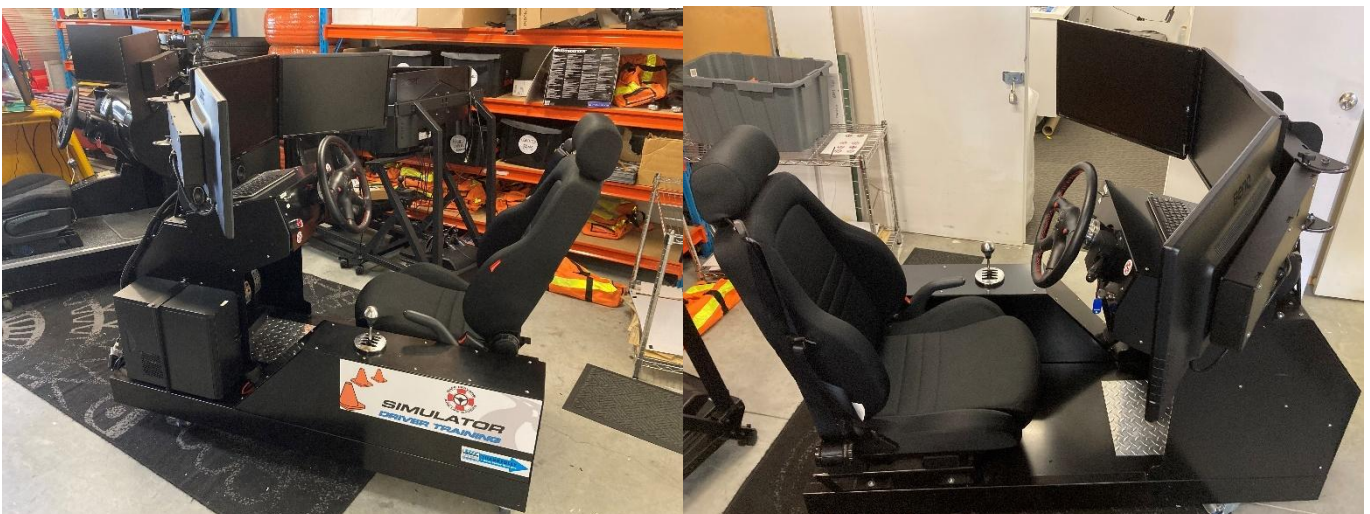
Some simulators are constructed very cheaply and whilst they might have a functioning dashboard and pedal systems, there are concerns over back-up support and replacement of broken components which might render your simulator inoperative for long periods.

Some simulators we have encountered promote training videos that are actually the video footage of the owner's manual of a foreign car and have little relevance to the simulator user. Also some simulators we have encountered use colour blindness tests and other "value adding" software packages that are supplied in breach of copyright from their respective owners.



## **REPAIR/UPGRADE OF OTHER DRIVING SIMULATORS**

Given our experience with driving simulators, we also can repair and/or upgrade other simulator units. To date we have worked on Simworx simulators owned by Youth Justice, Salvation Army and RACQ. All had their computers upgraded and the system converted to City Car Driving simulation software (commercial version).







## FREQUENTLY ASKED QUESTIONS

**Q. Can I choose the colour of the simulator frame?**

**A.** Yes for the SDT-21C model you can choose the colour of the frame and sheet metal. Any powder coating colour is available (see <https://www.specifyinterpon.com.au/color/>)



**Q. Can I use other software on this simulator?**

**A.** Yes, the simulator is a PC computer with a Windows 10 Operating System, this means you can purchase and install other software by internet download or via USB or USB connected CD drive. This means other simulator programs (for example forklift, crane, tractor and “car racing” style games) can also be installed giving the simulator other benefits and appeal to different users. Many of the cars racing simulations have amazing graphics, realistic physics and some have advanced driving challenges like slalom, braking and lane changing



**DIRT 3**



**F1 2016**



**PROJECT CARS 3**



**FORZA HORIZON 3**



**ASSETTO CORSA**



**rFACTOR**



**NEED FOR SPEED**



**GRID AUTOSPORT**



**EURO TRUCK 2**

**Q. Does the simulator software support VR Headgear?**

A. Yes the software supports Oculus Rift, HTC Vive and TrackIR  
VR headsets can be supplied as an optional extra with the SDT-21B and SDT-21C sims.

**Q. What are the simulator dimensions?**

<u>SIMULATOR MODEL</u>	<u>HEIGHT</u>	<u>WIDTH</u>	<u>LENGTH</u>	<u>WEIGHT</u>
SDT-21A + components collapsed	320 mm	610 mm	980 mm	35 kg
SDT-21B frame only	1180 mm	800 mm	1450 mm	60 kg
SDT-21B with 3 screens	1250 mm	1800 mm	1450 mm	75 kg
Motion SDT-21B with 3 screens	1250 mm	1800 mm	1450 mm	90 kg
SDT-21C frame only	1340 mm	750 mm	2100 mm	95 kg
SDT-21C with 3 screens	1340 mm	1950 mm	2100 mm	105 kg

**Q. Where is the computer located?**

A. For the SDT-21B a tower case is supplied to sit beside the simulator on the handbrake side.  
For the SDT-21C simulator the computer is enclosed under the seat in a secure storage compartment. This is ventilated to aid with cooling the computer.

**Q. Are software upgrades available?**

A. Yes we work with our simulator owners to act as a cooperative and jointly submit requests for software upgrades and share the development costs between all parties involved. This means future software upgrades would cost substantially less and all users share the upgraded changes, compared to charging one buyer for exclusive customisation.

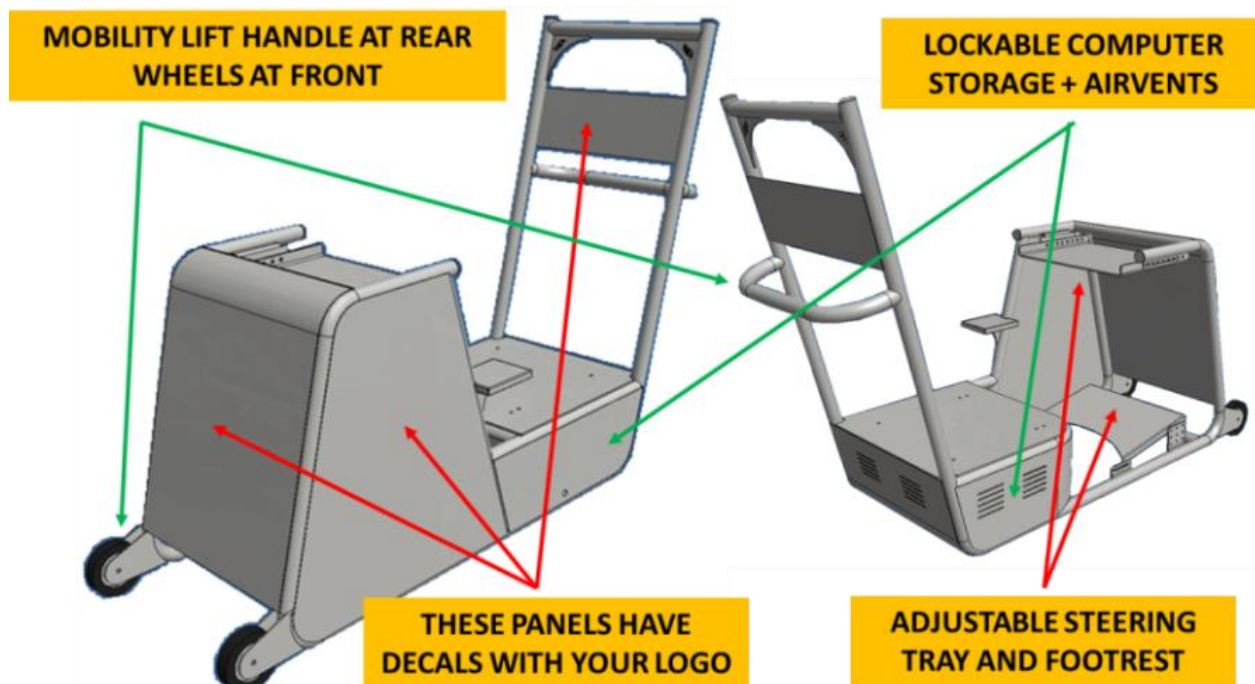
**Q. How do I move the simulator around?**

A. The SDT-21B simulator has castor wheels to roll around between rooms.  
With the screens removed both simulators can go through a standard doorway or hallway.  
The SDT-21C simulator has a mobility lift handle at the rear and wheels at the front. It is easy for 1 person to wheel around once the triple screens have been removed.  
The following "how to" video explains how to move the SDT-21C model simulator.



**HOW TO MOVE YOUR DRIVING SIMULATOR**

<https://youtu.be/DQ52RnQF-Eg>





**Q. Can you purchase the Home Edition of the software for commercial usage?**

A. No, if the software is being used for commercial purposes (business, research, driving school, driver training) the Enterprise edition is required. The Enterprise edition is licensed for commercial use and supports triple screens, is fully unlocked, does not require constant internet connection and is protected by a USB security HASP key.

This video explains the different software licenses: <https://youtu.be/NcxbMbuulcs>

## City Car Driving - commercial usage license

The **Home Edition** of our car simulator presented on our website **may not** be used for **commercial** or any other purposes, which are different from using it for personal purposes at home. Its license provides rights **only for personal use** at home for basic users and **not** for commercial organizations, **not** for government structures, **not** for research institutes or etc.

For **commercial purposes** we have the **Enterprise Edition** of the simulator. Its license **allows** using it for **commercial** purposes.

**Do you have a driving school? Are you a manufacturer of driving simulators, which needs a special software to use it on a driving simulation unit? Or maybe you just wish to use our simulator for any other commercial purposes? Then contact us now! Purchase the commercial license! Become our reliable partner! And you will be using the most advanced and maximum realistic driving simulation software!**

### Enterprise Edition features:

- Full **DirectX 11** support (including the **triple screen** mode).
- Don't have achievement system (all cars and locations are **unlocked** by default).
- Different user interface.
- Doesn't require the **constant Internet** connection.
- Protected by the USB **HASP** key.

**Q. Can the simulator be used to address alcohol impaired driving?**

A. The latest version of the software has an alcohol impaired driving mode, plus Fatal Vision alcohol impairment goggles are supplied with all SDT simulators for students to wear to provide further educational experiences.



**Q. Can the simulator demonstrate fatigue or distracted driving?**

A. Yes there are many ways an instructor can ask a student driver to distract themselves. With the optional **Drowsy and Distracted Driving Goggles** an instructor can also control the “blinking” rate of the goggles worn by participants to simulate the experience of drowsy driving (like micro sleeps) and also distracted driving. Some universities are using the simulator for research into fatigue and they monitor the driving performance of different participants using the telemetry version of the software. See promotional video at <https://youtu.be/qTm38n3lUSk>



Wearers experience simulated impairment from drowsiness or distracted driving with new technology

**Q. Who is using SDT driving simulators?**

**A. SDT-21A simulators are currently in use by:**

- South Australian Police (school driver training program) <sup>1</sup>
- 4 simulators to Canberra PCYC (school driver training program) <sup>2,3,4,5</sup>

**SDT-21B (or SDT-182) simulators are currently in use by:**

- Port Kembla Hospital (patient rehabilitation trial) <sup>1</sup>
- Afford in Sydney (mental health patients) <sup>2</sup>
- Kalgoorlie YMCA for youth road safety programs <sup>3</sup>
- Optalert Australia in Melbourne for fatigue research and R&D testing <sup>4</sup>
- Department of Youth Justice for high school driver safety programs in Hervey Bay <sup>5</sup>
- R.E.D. Inc in Lismore for youth driver training and mentoring for driver licensing <sup>6</sup>
- Lajamanu (Victoria Daly Council) for driver education in remote community <sup>7</sup>
- Victoria University for paramedic driver evaluations and training <sup>8</sup>
- Migrant Action Trust for driver education in Auckland (NZ) <sup>9</sup>
- Gilroy Catholic College (Castle Hill) for driver education via the Autism department <sup>10</sup>
- Investing in our Youth for driver education around Bunbury (WA) <sup>11</sup>
- Picton High School (3 x 21B simulators) for youth driver education <sup>12, 13, 17</sup>
- Trinidad Automobile Association for youth driver education (motion platform included) <sup>14</sup>
- Black Swan International for staff training in Port Moresby (PNG) <sup>15</sup>
- Drive 4 Life Salvation Army Driver Training (Brisbane) <sup>16</sup>
- Greenacres (Wollongong) for youth driver education <sup>18</sup>
- Ela Motors in Papua New Guinea (for staff and customer training) <sup>19</sup>
- Kanahooka High School (2 x 21B simulators) for youth driver education <sup>20, 21</sup>
- Stirling Bank in Nigeria (for staff and customer training) <sup>22</sup>
- Wellington High School (NSW) (for student driver training) <sup>23</sup>

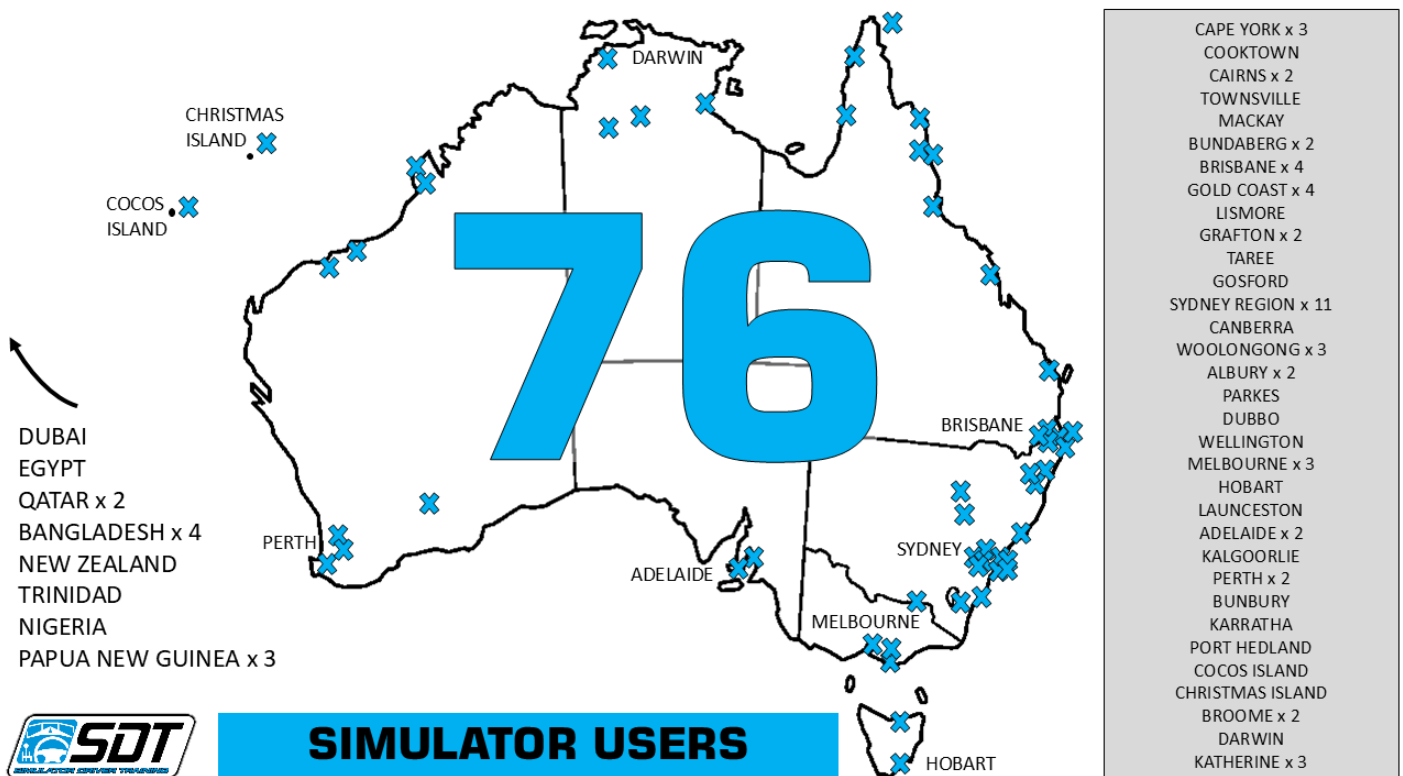
**SDT-21C (or SDT-183) simulators are currently in use by:**

- SDT (our company) for high school driver safety programs in South-east Queensland <sup>1</sup>
- Wugular School for novice driver training near Katherine <sup>2</sup>
- South Australian Police for high school driver safety programs <sup>3</sup>
- Warringa College in Melbourne for high school driver safety programs <sup>4</sup>
- Queensland Youth Justice for driver safety programs in Townsville & Cairns (2 units) <sup>5,6</sup>
- Darwin Prison (for traffic offender programs) <sup>7</sup>
- Northern TAFE (2 units for youth and aboriginal road safety in Karratha and Port Hedland) <sup>8,9</sup>
- Murrumbidgee Youth Detention Centre in Canberra (for traffic offender programs) <sup>10</sup>
- PCYC Albury for youth driver safety programs <sup>11</sup>
- PCYC Perth for youth driver safety programs <sup>12</sup>
- PCYC Tasmania (Bridgewater) for youth driver safety programs <sup>13</sup>
- Indian Ocean Group Training (2 units) for driver education on Christmas and Cocos Islands <sup>14,15</sup>
- Weill Cornell Medical College in Qatar (2 units) for research into driver fatigue <sup>16,17</sup>
- Lafarge Holcim for fleet safety in Dubai <sup>18</sup>
- Putland ETU, a special education unit of Cobham Juvenile Detention Centre in Sydney <sup>19</sup>
- Disability Services Australia for driver education programs in Bankstown (Sydney) <sup>20</sup>
- AB Paterson College (3 units) for student driver education <sup>21,22,23</sup>
- Cooktown PCYC for novice driver training in Cooktown <sup>24</sup>
- BRTC Bangladesh (4 simulators) for driver training of government personnel <sup>25,26,27,28</sup>
- Wingham Rotary for Taree PCYC student driver education <sup>29</sup>
- Drive Wise (Mittagong) for school-based driver education <sup>30</sup>
- NSW Youth Justice (5 units) for use at Youth Detention Centres across NSW <sup>31,32,33,34,35</sup>
- My CDP (Ngukurr Urapunga) for employment and driver training in this remote community <sup>36</sup>
- Changing Lanes Program in Grafton <sup>37</sup>
- My Pathway (4 units) for driver training in Cairns, Naparum, Doomadgee, Thursday Island <sup>38,39,40,41</sup>
- Nirrumbuk Aboriginal Corporation in Broome (1 x driving simulator and 1 x construction simulator) <sup>42,43</sup>
- Parkes Rotary Club for school-based driver education <sup>44</sup>
- Picton High School (1 x 21C simulator) for youth driver education <sup>45</sup>
- Yillipayinya Aboriginal Corporation (1 x 21A simulator + 1 x construction simulator) <sup>46</sup>
- Ela Motors in Papua New Guinea (for staff and customer training) <sup>47</sup>
- Ngarliyarndu Bindirri Aboriginal Corporation (for job ready training in Pilbara Western Australia) <sup>48</sup>
- QWrite2Drive Driving School (Mackay, QLD) <sup>49</sup>
- Thriving Multicultural Communities (Gold Coast, QLD) <sup>50</sup>



**A commercial licence (enterprise edition) of City Car Driving software has purchased for use in other simulators by:**

- iDriveSim (Maleny)
- Hyper Simulators (Auckland)
- Aurora Australis Technology (New Zealand)
- Motum Simulators (Melbourne)
- Curtin University (Perth)
- eLC Pte Ltd (Singapore) – 10 copies
- Pegasus Aero Med (South Australia)
- PCYC Perth - software used to upgrade Simworx simulator
- Queensland Youth Justice (Gold Coast) - software used to upgrade Simworx simulator
- Salvation Army (Bundaberg) - software used to upgrade Simworx simulator
- RACQ (Brisbane) – 2 copies of the software were used to upgrade Simworx simulator
- Chyromed Works Sdn. Bhd. (Kuala Lumpur) – 3 copies
- Driving Work Life Opportunities (Stanthorpe)



**Q. Can SDT help setup a driver training institute/academy?**

**A.** Yes SDT is Asia-Pacific's leading driver training company. We have operated across the Asia-Pacific since 1996, delivering a range of driver training programs.



**WATCH OUR COMPANY PROFILE VIDEO**

<https://youtu.be/Ci50YZbItCo>



**DESIGN OF DRIVER TRAINING CENTRES**

<https://youtu.be/oo2M93FKNss>



Services we offer include:

- ✓ Supply of driving simulators and driver training resources
- ✓ Supply of train-the-trainer services to upskill or develop driving instructors
- ✓ Accreditation, review and mentoring of instructors
- ✓ Consultation on the design of driver training facilities
- ✓ Help with business operation, marketing & procedures



## FOR MORE INFORMATION CONTACT SDT

Simulator Driver Training is a division of Safe Drive Training (Aust) Pty Ltd, one of Asia-Pacific's leading driver training providers. ABN 52094561213



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