

# Canine Simulator Parts

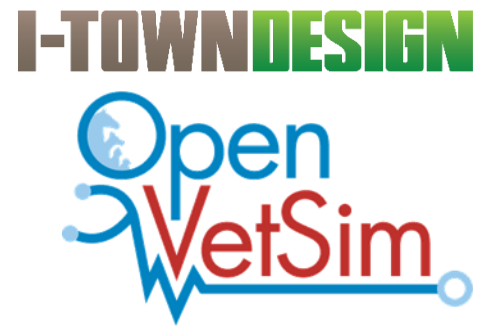
## Price List

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Newforce Solutions provides components and consulting services for the Cornell Canine Simulator. This price list includes most of the major components used in building the canine simulator.

This is a preliminary price list, subject to change. To purchase, contact:

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### Simulation Controller

This is a full control unit, including configured Beaglebone and Tsunami. It is housed in a plastic box (3D printed).

Part	Description	Price
<b>Simulation Controller</b>	Complete Simulation Controller including Beaglebone, Tsunami, SimCape and housing. Network connection is 10/100 Base-T Ethernet	\$1250.00

### Simulation Manager

A compact Linux PC running Ubuntu 18.04 LTS hosts the simulation management system, the Instructor Interface (via Web Server) and the Student Vitals display. Open Broadcast Suite is installed to allow recording and playback of simulation sessions.

Part	Description	Price
<b>Simulation Manager</b>	Compact Linux PC with 1TB Hard Disk Drive and 8 GB SDRAM. Installed with Ubuntu 18.04 LTS and configured with the Sim-Mgr software, Sim-II (Instructor Interface) Web Service and Student Vitals Display support. (video monitor is required, not provided)	\$1250.00
<b>Simulation Manager - Laptop</b>	Laptop PC running Linux with 1TB Hard Disk Drive and 8 GB SDRAM. Installed with Ubuntu 18.04 LTS and configured with the Sim-Mgr software, Sim-II (Instructor Interface) Web Service and Student Vitals Display support.	\$1250.00

### Pulse Unit

The Pulse Unit provides palpation sense and pulse simulation. 4 are typically used for a canine simulator (2 dorsal and 2 femoral).

Part	Description	Price
<b>Pulse Unit – Femoral</b>	Fully assembled unit. Single unit.	\$75.00
<b>Pulse Unit – Dorsal</b>	Fully assembled unit. Single unit. – <b>Not Yet Available</b>	TDB

### Mannequin Transition Board

Used in the mannequin to fan out from the DB-15 connector to headers for pulse units, speakers and Chest Compression Sensor.

Part	Description	Price
<b>Mannequin Transition Board – PCB</b>	Bare PCB	\$20.00
<b>Mannequin Transition Board – Assembly</b>	Populated Transition Board	\$45.00

## SIM Cape

The SimCape is the primary hardware component for the Simulation Controller. It provides power conversion, air system controls, audio amplifiers (for pulse and vocalizations) and air pressure sensors. It connects directly to a Beaglebone Black microcontroller and to a Tsunami Wav Trigger.

Part	Description	Price
<b>SimCape PCB</b>	Bare PCB for Simulation Controller	\$40.00
<b>Sim Cape Assembly</b>	Simulation Cape PCB fully populated and tested. (This does not include a Beaglebone or Tsunami).	\$750.00

## PseudoScope

The PseudoScope is a simulated Stethoscope chest piece with an RFID Reader and a headset jack. The PseudoScope senses the RFID tags mounted in the mannequin chest walls.

Part	Description	Price
<b>PseudoScope – PCB</b>	Bare PCB	\$15.00
<b>PseudoScope – Assembly</b>	Includes RFID Reader, 3D Printed housing. Fully assembled and tested.	\$175.00
<b>RFID Tags</b>	50 - 25mm 125KHz RFID tags, for placement in the mannequin chest walls	\$100.00

## Chest Compression Sensor

The Chest Compression Sensor is a 3-Axis accelerometer, with cable to connect to the Transition board. Fully assembled and tested.

Part	Description	Price
<b>Chest Compression Detector</b>	Accelerometer for Chest Compression Sensing.	\$25.00

## Air Controls

The Air control system uses Solenoid Valves to fill and deflate the right and left chest walls. The two sides are controlled separately. Pressurized air is required at 5-10 PSI.

Part	Description	Price
<b>Air Control Transition PCB</b>	Provides transition from the DB-9 cable to screw terminals for connections to the solenoids. Bare PCB	\$15.00
<b>Air Control Transition Board</b>	Fully assembled and tested.	\$40.00
<b>Air Control Unit</b>	Boxed unit including 2 rise solenoids, 2 fall solenoids, flow control valves and transition board. Fully assembled and tested.	\$200.00
<b>Air Control Regulator</b>	Step down regulator for Air control. This unit attaches to a high-pressure air compressor and regulates the pressure to the required 5 PSI.	\$50.00
<b>Air Compressor</b>	16L/Min Compressor to provide air for lung lifters. This is used instead of a high-pressure compressor and regulator.	\$75.00

## Complete System

A complete system includes all the parts required for the simulation system, installed in a Rescue Critters' "Advanced Airway Jerry" mannequin.

Part	Description	Price
<b>Complete System</b>	Includes fully assembled Mannequin, Simulation Controller, Simulation Manager, Air Control Unit, Air Compressor, 2 Pulse Units, Chest Compression Sensor, PseudoScope and 50-point auscultation array. Software fully installed and full system testing.	\$7500.00

*Orders for complete systems may require a 25% upfront payment before we order the mannequin.*

## Consulting Services

We can provide hardware and software assistance to assist you in the development and construction of your simulation system. Contact us for details.

## Shipping

We generally use USPS Priority Mail shipping. Typical shipping charges for parts are \$20.00 for US and \$35.00 for Canada. All shipments will be insured for the full retail value. Shipping charges may be higher or lower based on the unit weight and value.

Shipping charges for complete systems are higher and must be quoted based on the destination.

Where specific shipping is requested (for example, UPS or FedEx build to recipients account), we may add an additional \$10 fee for the extra handling required.

## Sales Tax

NYS Sales tax will be applied to any sales within New York State, unless a Tax-Exemption Certificate is provided.

## Lead Time

All assemblies are built to order. Typically, 2-3 weeks will be required for assembly orders.

Mannequins require a lead time of up to 20 weeks. This is dependent on the availability from Rescue Critters. We will generally ship 2-3 weeks after we have the mannequin in hand.

## Payment Terms

We accept purchase orders from recognized colleges and universities, Net-30 or less is acceptable.

We also accept credit cards and PayPal, with payment at time of shipment.