

Operative|Experience

3B
3B Scientific



TCCS PRO SERIES

INTRODUCING THE POWER
OF MODULARITY

TCCS PRO SERIES

Supercharge your trauma care training



Introducing the new TCCS Pro Series from Operative Experience, a revolutionary, fully modular portfolio of trauma care simulators featuring groundbreaking, on-the-fly interchangeable wounds from a trauma patient to a medical patient, with fully-integrated patient monitoring and all-new advanced software capabilities and scenarios.

With TCCS Pro's interchangeable wound capability, each simulator can be quickly and easily modified to support a uniquely diverse range of emergency scenarios and training possibilities.



TCCS Pro Smart Limbs™ have fully interchangeable trauma wound configurations with software designed to automatically adjust to specific limb features.

➤ PLUG-AND-PLAY MODULAR TRAUMA CONFIGURATIONS



Healthy, no injuries



Closed fractures



Face injury



GSW on chest



Open fractures



Amputations



Severe burns



Inguinal wounds

➤ FULLY-INTEGRATED PATIENT MONITORING



- ECG Monitoring with over 20 different waveforms including Static and Live/Dynamic 12-lead ECG Patient Vital Signs (HR, RR, NiBP, Art BP, EtCO₂, SpO₂, T and more)
- Multiple Waveform Display (SpO₂, CO₂ and more)
- Mimic Proprietary Defibrillators, AEDs and Monitors, including LifePak, Zoll and Philips



Visceration

➤ EASY-TO-USE SOFTWARE AND SCENARIOS



- iOS/Android Instructor Tablet and Software
- Clinical and Trauma Scenarios
- Simulation Logs
- Real-Time Self Diagnostics

TCCS PLUS PRO

TCCS Plus Pro is a fully-modular, high-fidelity, patient simulator for individual and multi-disciplinary TCCC and prolonged field care training, with lifelike soft tissue and skin, advanced physiology and conditions, drug support, integrated patient monitoring, automated expert-validated clinical scenarios and on-the-fly, instructor-driven scenarios. Available in anatomically accurate male and female models and African American, Hispanic and Caucasian skin tone options.



Pro Series Modularity and Software

- Interchangeable plug-and-play limbs
- Compatible for add-on moulage wounds
- Easy-to-use instructor tablet and new OEI SIM Pro Software (iOS, Android and Mac/PC)
- Compatible for OEI SIM Pro Software upgrades
- Smart Limb™ recognition
- Integrated patient monitoring
- Clinical and trauma scenarios
- Drug support
- Maintain simulation logs
- Complete self-diagnostics

Mannequin

- Full-body, wireless and tetherless simulator
- Ruggedized and water-resistant for indoor and outdoor environments
- Patient decontamination capable
- Realistic and lifelike weight (male: 185 lbs/ ca. 84kg | female: 135 lbs/ca. 61kg)
- Fully-articulated limbs
- Hypothermia prevention/active heating blanket
- 10+ hours battery life

Establish Perimeter

- Perform first impression assessment
- Perform patient extraction
- Perform primary assessment
- Triage patients
- Perform secondary assessment (head to toe)

Airway Management

- Difficult airway with tongue swelling
- Head tilt, chin lift & jaw thrust maneuvers
- Assessment of oral and nasal airways
- Perform mouth-mouth respirations with or without barrier device
- Perform suction of the nasal and oral pharyngeal airways
- Perform foreign body removal from oral cavity
- Realistic airway – intubation capable
- Supports nasal/oral pharyngeal airway devices, supraglottic airway, endotracheal & nasal intubation, and blind intubation
- Perform needle & surgical cricothyrotomy
- Placement in the recovery position

Circulation

- Pelvic binder placement
- Unilateral blood pressure measurement
- Heart rate/pulse remotely controlled
- Multiple heart sounds
- Assess pulses (carotid, brachial, radial, femoral, popliteal, dorsalis pedis, posterior pedis)
- Sternal/humeral/tibial intraosseous placement
- Chest compressions
- Venipuncture/IV catheter placement/fluid & blood infusion

Hemorrhage Management

- Assess & treat arterial hemorrhage
- Assess & treat venous hemorrhage
- Assess & treat traumatic amputation
- Control bleeding by direct pressure/pressure points/elevation/wound packing/pressure bandage/tourniquet/junctional tourniquet
- Assess/treat entrance/exit penetrating chest wound
- Multiple and independent bleeding sites
- Remote-controlled pulsatile arterial bleeding
- Remote-controlled venous bleeding
- Penetrating trauma wounds
- Blood reservoir: 3l male/1.5l female

Neurological and Musculoskeletal

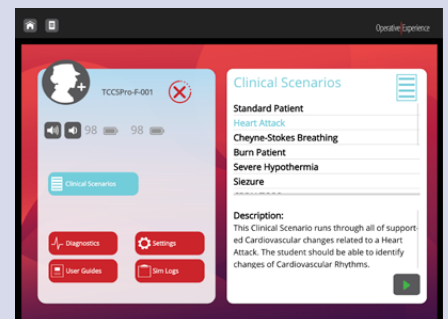
- Bilateral blinking eyes
- Assess pupil (normal/constricted/dilated)
- Bilateral pupillary assessment
- Apply cervical collar
- Assess and treat fractures
- Assess for crepitus

Respiration and Breathing

- Assess and treat for tension pneumothorax
- Perform mid-clavicular and anterior mid-axillary needle thoracentesis
- Bilateral chest tube insertion
- Multiple bilateral and unilateral lung sounds
- Spontaneous breathing
- Assess respiratory rate, rhythm & depth
- Assess bilateral/unilateral chest rise/fall
- Supports BVM ventilation with chest rise & fall
- Treat penetrating chest wound (entrance and exit)
- Apply chest seal

Urinary and Integumentary

- Urinary catheterization placement
- Straight and indwelling foley catheters
- Assess/treat burns



Upgrade Options for TCCS Plus Pro:

- Additional interchangeable limbs and moulage wounds
- Additional clinical and trauma scenarios
- Additional drug support library
- Additional premium real-world patient monitor screens

TCCS PRO

TCCS Pro is a hyper-real, fully-modular, patient simulator for comprehensive TCCC team training with lifelike soft tissue and skin, drug support, automated expert-validated clinical scenarios and on-the-fly, instructor-driven scenarios. Available in anatomically accurate male and female models and African American, Hispanic and Caucasian skin tone options.



Pro Series Modularity and Software

- Interchangeable plug-and-play limbs
- Compatible for add-on moulage wounds
- Easy-to-use instructor tablet and new OEI SIM Pro Software (iOS, Android and Mac/PC)
- Compatible for OEI SIM Pro Software upgrades
- Smart Limb™ recognition
- Clinical and trauma scenarios
- Drug support
- Maintain simulation logs
- Complete self-diagnostics

Mannequin

- Full-body, wireless and tetherless simulator
- Ruggedized and water-resistant for indoor and outdoor environments
- Patient decontamination capable
- Realistic and lifelike weight (male: 185 lbs/ ca. 84kg | female: 135 lbs/ca. 61kg)
- Fully-articulated limbs
- Hypothermia prevention/active heating blanket
- 10+ hours battery life
- Two-way communication

Establish Perimeter

- Perform first impression assessment
- Perform patient extraction
- Perform primary assessment
- Triage patients
- Perform secondary assessment (head to toe)

Airway Management

- Head tilt, chin lift & jaw thrust maneuvers
- Assessment of oral and nasal airways
- Perform mouth-mouth respirations with or without barrier device
- Perform suction of the nasal and oral pharyngeal airways
- Perform foreign body removal from oral cavity
- Realistic airway – intubation capable
- Supports nasal/oral pharyngeal airway devices, supraglottic airway, endotracheal & nasal intubation, and blind intubation
- Perform needle & surgical cricothyrotomy
- Placement in the recovery position

Circulation

- Pelvic binder placement
- Heart rate/pulse remotely controlled
- Assess pulses (carotid & radial) sternal/humeral/ tibial intraosseous placement
- Chest compressions
- Venipuncture/IV catheter placement/fluid & blood infusion

Hemorrhage Management

- Assess & treat arterial hemorrhage
- Assess & treat venous hemorrhage
- Assess & treat traumatic amputation
- Control bleeding by direct pressure/ pressure points/elevation/wound packing/ pressure bandage/tourniquet/junctional tourniquet
- Assess & treat entrance/exit penetrating chest wound
- Multiple and independent bleeding sites
- Remote-controlled pulsatile arterial bleeding
- Remote-controlled venous bleeding
- Penetrating trauma wounds
- Blood reservoir: 3l male/1.5l female

Neurological and Musculoskeletal

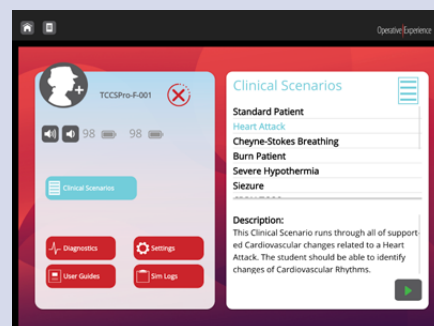
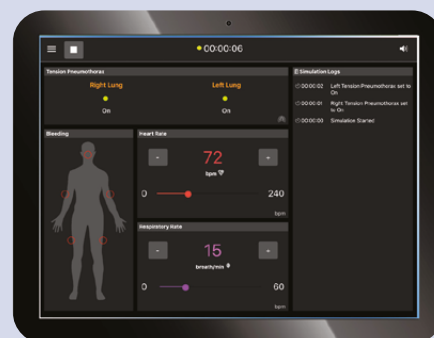
- Assess pupil (normal/constricted/dilated)
- Bilateral pupillary assessment
- Apply cervical collar
- Assess and treat fractures
- Assess for crepitus

Respiration and Breathing

- Assess and treat for tension pneumothorax
- Perform mid-clavicular and anterior mid-axillary needle thoracocentesis
- Spontaneous breathing
- Assess respiratory rate, rhythm & depth
- Assess bilateral/unilateral chest rise/fall
- Supports BVM ventilation with chest rise & fall
- Treat penetrating chest wound (entrance and exit)
- Apply chest seal

Urinary and Integumentary

- Urinary catheterization placement
- Straight and indwelling foley catheters
- Assess/treat burns



Upgrade Options for TCCS Pro:

- Additional interchangeable limbs and moulage wounds
- Additional clinical and trauma scenarios
- Additional drug support library
- Integrated patient monitoring
- Advanced patient physiology and conditions
- Additional premium real-world patient monitor screens

THCT PRO

Tactical Hemorrhage Control Trainer (THCT) is an ultra-lifelike, wireless and autonomous patient simulator for TCCC rapid assessment and hemorrhage control training. The THCT features independent upper and lower body venous and pulsatile arterial bleeding, controlled remotely with a free and easy-to-use mobile phone application. The THCT can also be used to train essential TCCC point-of-injury skills such as emergency airway management, needle decompression and intraosseous.

Available in anatomically accurate male and female models and African American, Hispanic and Caucasian skin tone options



Mannequin

- Full-body, wireless and tetherless simulator
- Ruggedized and water-resistant for indoor and outdoor environments
- Patient decontamination capable
- Realistic and lifelike weight (male: 185 lbs/ ca. 84kg | female: 135 lbs/ca. 61kg)
- Fully-articulated limbs
- Hypothermia prevention/active heating blanket
- 10+ hours battery life

Establish Perimeter

- Perform first impression assessment
- Perform patient extraction
- Perform primary assessment
- Triage patients
- Perform secondary assessment (head to toe)

Airway Management

- Head tilt, chin lift & jaw thrust maneuvers
- Assessment of oral and nasal airways
- Perform mouth-mouth respirations with or without barrier device
- Perform suction of the nasal and oral pharyngeal airways
- Perform foreign body removal from oral cavity
- Realistic airway – intubation capable
- Supports nasal/oral pharyngeal airway devices, supraglottic airway, endotracheal & nasal intubation, and blind intubation
- Perform needle & surgical cricothyrotomy
- Placement in the recovery position

Circulation

- Pelvic binder placement
- Heart rate remotely controlled
- Sternal/humeral/tibial intraosseous placement
- Chest compressions
- Venipuncture/IV catheter placement/fluid & blood infusion

Hemorrhage Management

- Assess & treat arterial hemorrhage
- Assess & treat venous hemorrhage
- Assess & treat traumatic amputation
- Control bleeding by direct pressure/pressure points/elevation/wound packing/pressure bandage/tourniquet/junctional tourniquet
- Assess/treat entrance/exit penetrating chest wound
- Multiple bleeding sites
- Remote-controlled arterial (pulsatile) and venous hemorrhage
- Penetrating trauma wounds
- Blood reservoir: 6l male/3.5l female

Neurological and Musculoskeletal

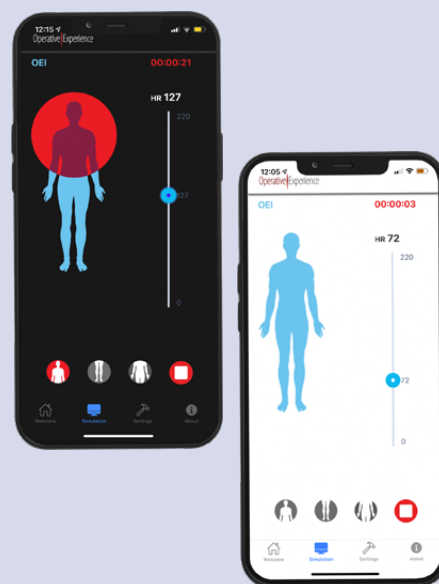
- Assess pupil (normal/constricted/dilated)
- Bilateral pupillary assessment
- Apply cervical collar
- Assess and treat fractures
- Assess for crepitus

Respiration and Breathing

- Assess and treat for tension pneumothorax
- Perform mid-clavicular and anterior mid-axillary needle thoracostomy
- Supports BVM ventilation with chest rise & fall
- Treat penetrating chest wound (entrance and exit)
- Apply chest seal

Urinary and Integumentary

- Urinary catheterization placement
- Straight and indwelling foley catheters
- Assess/treat burns (optional)



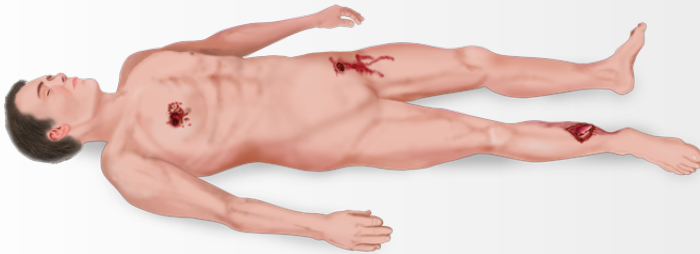
Pro Series Modularity

- Interchangeable plug-and-play limbs
- Compatible for add-on moulage wounds
- Easy-to-use instructor software for smart phones (iOS, Android)

WOUNDS & ETHNICITY

1

- GSW right chest entrance wound
- GSW right back exit wound
- Left inguinal wound
- Right tib/fib open fracture



4

- Closed right leg fracture
(not available for THCT models)
- Airway compromise



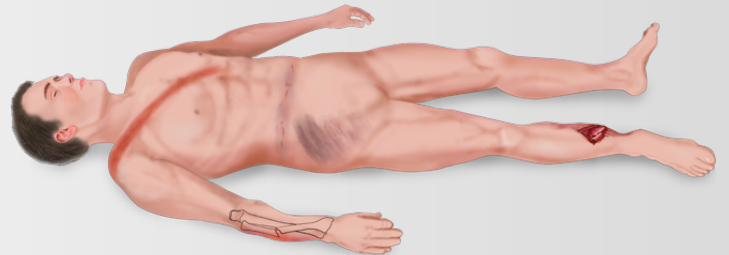
2

- GSW left chest entrance wound
- Left axillary wound
- Bilateral below the knee amputations



5

- Seat belt injury
- Closed lower arm fracture
- Right tib/fib open fracture
(not available for HCT models)



3

- GSW right chest entrance wound
- Left tib/fib below the knee amputation
- Right inguinal wound
- Left lower arm amputation



6

- Healthy body
(not available for HCT models)
- No visible wounds



Available in Caucasian, African American and Hispanic skin tones.
Illustrations by Suzanne Hayes Visuals.

TCCS PRO SERIES MODULAR WOUND OPTIONS

Choose from 16 different interchangeable trauma limbs and on-the-fly moulage wounds to supercharge your simulator training.

> TCCS PRO SMART LIMBS™

Interchangeable, plug-and-play trauma wound configurations with software designed to automatically adjust to specific limb features.



Healthy, no injuries



Closed fractures



Open fractures



Amputations

> REALISTIC ON-THE-FLY MOULAGE WOUNDS



Face Injury



GSW on chest*



Severe burns



Inguinal wounds*



Evisceration

*GSW wounds and inguinal wounds come with skin overlays for healthy body scenarios

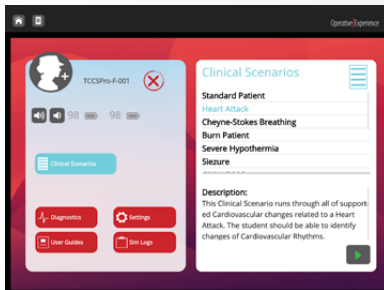
OEI SIM PRO SOFTWARE

Power up your simulation training with OEI Sim Pro software upgrade options



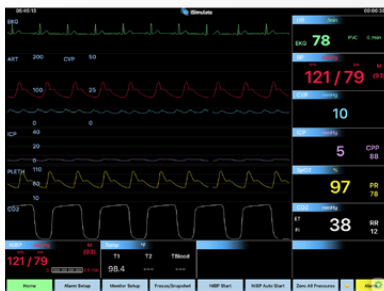
➤ INTERFACE AND CONTROLS

Take advantage of ongoing updates and improvements to the new OEI Sim Pro software features.



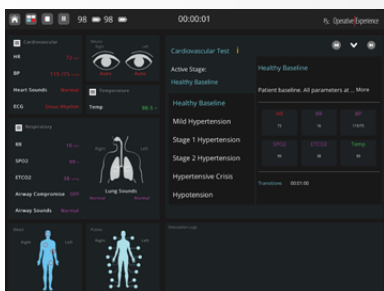
➤ CLINICAL SCENARIOS

Build your library of clinical and trauma scenarios validated by industry experts.



➤ CLINICAL SCENARIOS

Additional premium monitor screens available such as Zoll, LifePak, Philips and many more. (Available for TCCS Plus only)



➤ PATIENT CONDITIONS

Add advanced cardiovascular, respiratory, and temperature patient conditions to your simulation training.



➤ DRUG SUPPORT

Build your library of supported drugs for both trauma and clinical scenarios.

TECHNICAL SPECIFICATIONS

- Full-body, wireless and tetherless simulator
- Ruggedized and water-resistant
- Realistic and lifelike weight
 - male 185 lbs/ca. 84kg
 - female 135 lbs/ca. 61kg
 - (simulator weight can vary by +/- 5%)
- Dimensions
 - male 76" h x 28" w x 12" d / 193x71.1x30.5cm
 - female 65" h x 23.6" w x 11" d / 161.1x59.9x27.9cm
- Fully-articulated limbs
- Easy-to-use instructor tablet and software (iOS, Android and Mac/PC)
- Maintain simulation logs/self-diagnostics
- Dual pack Li-Ion batteries: 18.5V, 6400 MAh with built-in thermal protection
- 10+ hours battery life
- Hot-swappable battery capability
- Blood reservoir: 3l male/1.5l female
- Two-way communication:
 - line of sight range up to 100 meters
- AC Adapter and Charger:
 - Input: 100-240 VAC, 50-60 Hz
 - Output: 24 VDC 6A 120 W

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FOR MORE INFORMATION PLEASE CONTACT YOUR 3B SCIENTIFIC REPRESENTATIVE



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