CAE SimEquip Ventilator

Technical Specifications

Standard Equipment

(To be used with adult CAE Maestro patient simulators as an add-on)

Ventilator cart

Medical attachments (breathing circuit with mask and tracheal tube, SpO2 probe, CO2 sample line, O2 hose)

Learner tablet

All-in-one monitor

SimEquip Ventilator software and license

Electronic user guide

Optional Equipment

Instructor Standalone kit: router, instructor tablet, CAE Maestro with physiology software and license (required for standalone configuration)

Additional Controls

Leak, breathing-circuit disconnection

Key Features

Full range of typically monitored values

Full range of operator-adjustable parameters for each mode of ventilation common to conventional hospital ventilators

Adjustable screen layout, alarms and other settings

Provides experiential learning skills required to manage and monitor ventilation of a patient, and troubleshoot ventilator issues

17 alarms, 3 loops (pressure volume, pressure flow, volume flow), 39 numerics, 4 views, 6 waveforms (pressure, flow, volume, Edi, SpO², CO²)

Maneuvers: Inspiratory hold, expiratory hold

Ventilation Modes

Volume-controlled ventilation (VCV): VT, PEEP, Flow Trigger, RR, Tpause, Ti rise, I:E, FiO²

Pressure-controlled ventilation (PCV): Pi, PEEP,

Flow Trigger, RR, Ti rise, I:E, FiO²

Continuous positive airway pressure + pressure support (CPAP+PS): PEEP, ∆Psupp, Flow Trigger, Ti rise, End Inspiration %, FiO², Tapnea, Pi backup, RR backup, I:E backup

Volume support ventilation (VSV): PEEP, Flow Trigger, VT, Ti rise, End Inspiration %, FiO², Tapnea, VT backup, RR backup, I:E backup

Neurally adjusted ventilatory assist (NAVA): PEEP, Edi Trigger, Flow Trigger, NAVA Level, FiO², Tapnea, Pi backup, RR backup, I:E backup

Synchronized intermittent-mandatory ventilation volume control (SIMV VC): PEEP, Δ Psupp, Flow Trigger, VT, RR, Tpause, Ti rise, I:E, End Inspiration %, FiO²

CAE SimEquip Anesthesia

Technical Specifications

Standard Equipment

(To be used with adult CAE Maestro patient simulators as an add-on)

Anesthesia cart

Medical attachments (breathing circuit with mask and tracheal tube, SpO² probe, CO² sample line, O² hose, N²O hose, medical air hose, 3-lead ECG cables, IBP catheter, NIBP cuff, temperature probe)

2 monitors

SimEquip Anesthesia software and license

Electronic user guide

Optional Equipment

Instructor Standalone kit: router, instructor tablet, CAE Maestro with physiology software and license (required for standalone configuration)

Simulated Anesthetic Agents

Isoflurane

Sevoflurane

Desflurane

Additional Controls

O2 flush valve

ACGO valve

View soda lime canister control

Leak, breathing-circuit disconnection

Key Features

Simulates delivery of multiple anesthetic agents, with realistic responses

Simulates interaction of all anesthesia machine controls, including: APL valve, manual ventilation switch, rebreather bag (inspiration), anesthetic agent vaporizers (Isoflurane, Sevoflurane, Desflurane), gas flow dials (O², N²O, AIR)

Adjustable screen layout, alarms and other settings

36 alarms, 4 gauges, 3 loops, 51 numerics, 3 views, 5 waveforms

Full range of operator-adjustable parameters for each ventilation mode

Ventilation Modes

Volume-controlled ventilation (VCV): PEEP, Flow Trigger, VT, RR, Tpause, Ti rise, I:E

Pressure-controlled ventilation (PCV): PEEP, Pi,

Flow Trigger, RR, Ti rise, I:E

Continuous positive airway pressure + Pressure support (CPAP+PS): PEEP, Δ Psupp, Flow Trigger, Ti rise, Tapnea, Pi backup, RR backup, I:E backup

Synchronized intermittent-mandatory ventilation volume control (SIMV VC): PEEP, ∆Psupp, Flow Trigger, VT, RR, Tpause, Ti rise, I:E

\CAE SimEquip Transport Ventilator

Technical Specifications

Standard Equipment

(To be used with adult CAE Maestro patient simulators as an add-on)

Transport ventilator carry bag

Medical attachments (breathing circuit with mask and tracheal tube, SpO² probe, CO² sample line, O² hose)

Student tablet

SimEquip Transport Ventilator software and license

Electronic user guide

Optional Equipment

Instructor Standalone kit: router, instructor tablet, CAE Maestro with physiology software and license (required for standalone configuration)

Key Features

Full range of typically monitored values

Simulates ventilation of a simulated patient being tranported

Adjustable screen layout, alarms and other settings

Provides experiential learning skills required to configure a transport ventilator, manage and monitor ventilation of a simulated patient being transported, and troubleshoot ventilator issues

17 alarms, 3 loops, 23 numerics, 3 views, 5 waveforms

Ventilation Modes

Full range of operator-adjustable parameters for each mode of ventilation:

Volume-controlled ventilation (VCV): VT, PEEP,

Flow Trigger, RR, Tpause, Ti rise, I:E, FiO2

Pressure-controlled ventilation (PCV): Pi, PEEP, ∆Psupp, Flow Trigger, RR, Ti rise, I:E, FiO²

Continuous positive airway pressure (CPAP+PSV):

PEEP, ΔPsupp, Flow Trigger, Ti rise, End Inspiration %, FiO², Tapnea, Pi backup, RR backup, I:E backup

Volume support ventilation (VSV): PEEP, Flow Trigger, VT, Ti rise, End Inspiration %, FiO², Tapnea, VT backup, RR backup, I:E backup

Synchronized intermittent-mandatory ventilation (SIMV): PEEP, Δ Psupp, Flow Trigger, VT, RR, Tpause, Ti rise, I:E, End Inspiration %, FiO²

CAE SimEquip Defibrillator

Technical Specifications

Standard Equipment

(To be used with adult CAE Maestro patient simulators as an add-on)

Defibrillator carry bag

Therapy pads

3-lead ECG cables

Learner tablet

Software (monitor defibrillator and AED) and license

Electronic user guide

Optional Equipment

Instructor Standalone kit: router, instructor tablet,

CAE Maestro with physiology software and license (required for standalone configuration)

Medical attachments (12-lead ECG cables, temperature probe, CO² sample line, SpO² probe, NIBP cuff, IBP catheter)

Key Features

Full range of typically monitored values common to defibrillators and AEDs (HR, SpO², RR, ABP, and more)

Simulates electrical therapy (defibrillation, cardioversion, pacing), with realistic responses

Adjustable alarms and other settings

Provides experiential learning skills required to deliver electrical therapy, configure a defibrillator or manage defibrillation of a patient (e.g., responding to alarms, adjusting layout based on patient mode and/or operator preference)

Pads, ECG I, II, III, aVR, aVL, aVf, V1, V2, V3, V4, V5, V6, CO2, ABP, SpO2