

## O2 e700 Ventilator Protocol



The following guidelines are recommended for the intended use the e700 is a time-cycled, volume-constant and pressure-controlled emergency and transport ventilator designed for use in the pre-hospital, intrahospital, inter-hospital and transport settings. It is intended for use with Adult, child, infant patients with a tidal volume from 50 ml upwards who are in respiratory and/or cardiac arrest or respiratory distress and who require the ventilatory support.

### Contraindications:

1. Patients under 5kg
2. Patients tidal volume under 50ml

### Procedures:

1. Determine the need for ventilation or assisted ventilation
2. Establish airway
3. Paramedic shall perform endotracheal intubation if sedation is required see RSI protocol
4. Assemble the components of the O2 e700 vent assure proper working order.
  - Select vent mode which are - (Assist Control Ventilation). In this mode the ventilator can deliver volume ventilation.
  - SIMV (Synchronized Intermittent Mandatory Ventilation). In this mode the ventilator will deliver volume ventilation.
  - BiLVL (Biphasic Positive Airway Pressure) BiLVL mode is similar to SIMV but comes with pressure ventilation.
  - CPAP (Continuous Positive Airway Pressure) In CPAP mode, the ventilator will deliver a continuous flow rate to generate airway pressure and use the control valve to maintain CPAP levels.
  - CPR mode The CPR mode consists of timed chest compression audible prompts coupled with automatically delivered breaths for both intubated and mask ventilated patients.
5. Determine the proper tidal volume for the patient. Use following equation for adults and pediatric patients for ideal body weight. Tidal Volume; amount of air delivered in a single breath measured in ml. Average adult Vt is 6-8 ml/kg based on ideal body weight. Ideal Body Weight is based on gender and height. Male:  $52 \text{ kg} + 1.9 \text{ kg per inch over 5 feet}$  Female:  $49 \text{ kg} + 1.7 \text{ kg per inch over 5 feet}$ .
  - Example for 6' male  $52\text{kg} + 22.8 = 74.8 \times 8 = 598.4$  tidal volume
  - Example for 5'5" female  $49\text{kg} + 8.5 = 57.5 \times 8 = 460$  tidal volume
6. Set desired breaths per minute on the ventilator control module
  - Intubated Adults 8-10 per minute
  - Intubated Pediatrics 16-20 minute
7. Attach the O2 e700 circuit to vent and to endotracheal tube.