

# I:E Ratio

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# I:E Ratio

- **Inspiratory-to-expiratory time (I:E) ratio.**
  - **What You Need to Know → What is the “Total cycle time” OR “Respiratory cycle time”**
  - **Total Cycle time= the total amount of time for one respiration/ventilation (inhalation and exhalation phases)**
  - **How to obtain Total Cycle Time: take 60 seconds and divide it by pt’s measured respiratory rate**
    - **Set Respiratory rate: What you plug into vent**
    - **Measured Respiratory rate: How many actual respirations the patient is taking.**
      - **60 seconds in a minute ÷ measured respiratory rate of 20 = total cycle time of 3 seconds**

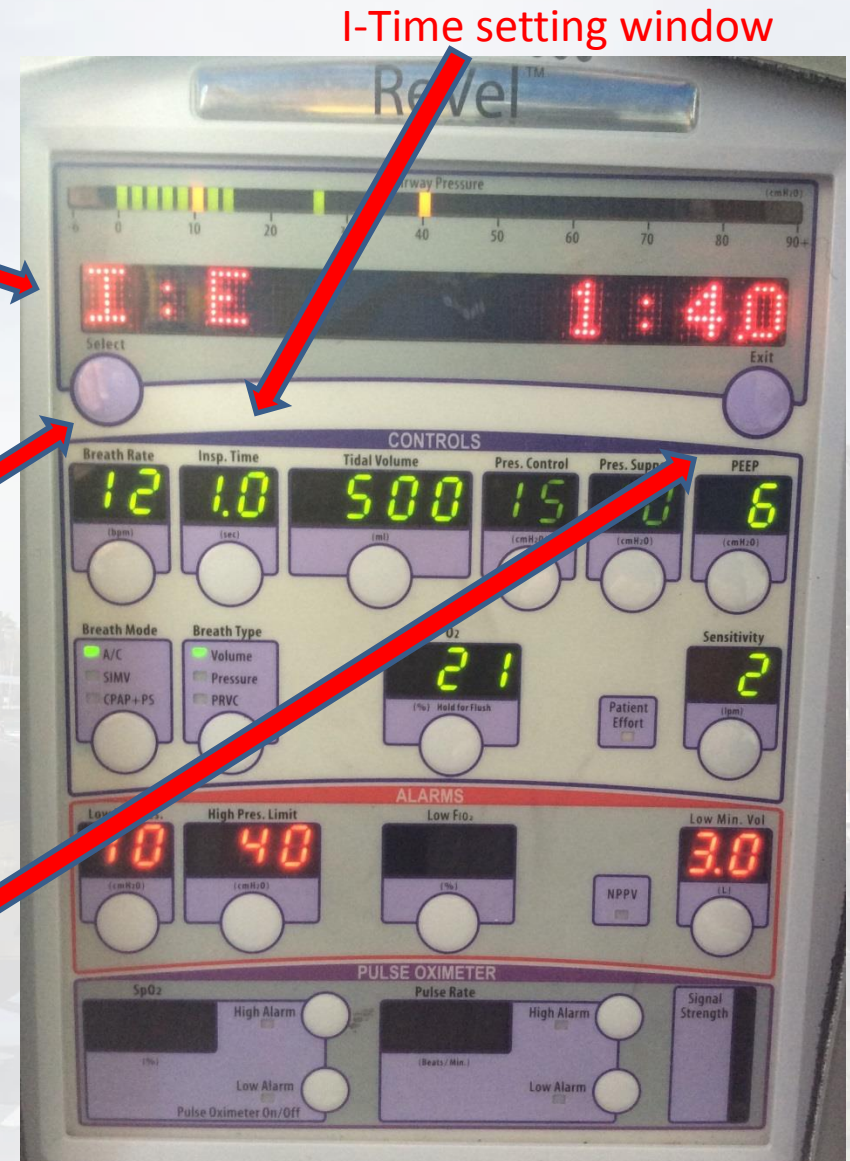
# I:E Ratio

- So for inspiration and expiration you have 3 seconds
  - I:time (Inspiratory Time)- ReVel Adult default is 1 second (can be changed by you the practitioner)
  - E:time (Expiratory Time)- What's left over (3 seconds total cycle time minus 1 second inspiratory time)= 2 second expiratory time
  - I:E Ratio= 1:2
- Respiratory Rate 15
  - $60 \div 15 = 4$  (total cycle time)
  - I= 1 second, E= 3 seconds, I:E Ratio 1:3
- Respiratory Rate 12
  - $60 \div 12 = 5$  (total cycle time)
  - I= 1 second, E= 4 seconds, I:E Ratio 1:4



# ReVel Ventilator

- I:E ratio populates through Scrolling Display
- Pausing Scrolling Display to evaluate I:E or any other measurement.
  1. Press “SELECT” button
  2. Rotate “Scroll Knob” to desired measurement.
- Exit “paused” display and return to scrolling display.
  1. Press “Exit” button.



# emsCharts Ventilator Box

Set Respiratory Rate

Ventilator Information Log	
Settings	Measurement
Mode: <input type="text" value="Assisted / Controlled"/>	Peak Insp Pressure: <input type="text" value=""/> cmH <sub>2</sub> O
Breath Type: <input type="text" value="Volume Control"/>	Auto PEEP: <input type="text" value=""/> cmH <sub>2</sub> O
Resp Rate: <input type="text" value="12"/> bpm	Plateau Pressure: <input type="text" value=""/> cmH <sub>2</sub> O
Tidal Volume: <input type="text" value=""/> mL	Minute Vent: <input type="text" value=""/> Lpm
Insp. Pressure: <input type="text" value=""/> cmH <sub>2</sub> O	I:E Ratio: <input type="text" value="1:4"/>
PEEP: <input type="text" value=""/> cmH <sub>2</sub> O	Resp Rate: <input type="text" value=""/> bpm
FiO <sub>2</sub> : <input type="text" value=""/>	
I:Time: <input type="text" value="1"/> seconds	
Pressure Support: <input type="text" value=""/> cmH <sub>2</sub> O	
Flow Rate: <input type="text" value=""/> Lpm	
Sensitivity: <input type="text" value=""/>	
Mean Airway Pressure: <input type="text" value=""/> cmH <sub>2</sub> O	
Delta-P: <input type="text" value=""/> cmH <sub>2</sub> O	
Hertz: <input type="text" value=""/>	
iNO: <input type="text" value=""/>	

I:E Ratio

Measured Respiratory Rate

Set Inspiratory Time (Revel Default 1 second)

# Notes

- Infant ReVel default I:Time= 0.3 seconds
- Pediatric ReVel default I:Time= 0.7 seconds
- Measured I:E ratios will have decimal points
  - They are actual real time measurements that change dependent on patients measured respiratory rate.
  - Examples= 1:3.2, 1:4.1, 1:2.7, 0.7:2.3



Little Gasparilla Pic.  
for all who couldn't make it.

