

## Quick Reference Card Ventrain®

*Note: this quick reference card is a summary of the Instructions for Use. Please read the full Instructions for Use before using Ventrain.*

1. Insert the catheter (endotracheal or transtracheal).
2. Connect oxygen tubing of Ventrain to the oxygen supply (3.5 – 5.0 bar, 100%) with a pressure compensated flow regulator (for example a medical oxygen cylinder with flow regulation).
3. Set flow:
  - 15 L/min for adults;
  - 2 - 6 L/min for pediatric patients.
4. Hold Ventrain in the equilibration position (both holes open, see figure 1).
5. Attach the male luer connector of Ventrain to the inserted catheter.
6. Make a choice whether to start Ventrain ventilation with inspiration or expiration. Ventilate by securely closing the index finger hole, and alternatingly closing the thumb hole (inspiration: figure 2) and opening the thumb hole (expiration: figure 3). Use an inspiration- and expiration time, depending on the wanted tidal volume (see table 1):
  - 1-2 seconds for adults;
  - 0.5 seconds for pediatric patients.

**Closely observe the thorax excursions! Adjust the inspiration- and expiration time based on the chest movements.**
7. Use the equilibration position (both holes open, see figure 1), after each 5 ventilation cycles, for at least 5 seconds, to avoid excessive positive or negative pressure in the lungs.

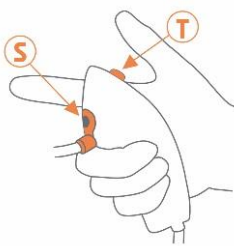


Figure 1. Equilibration

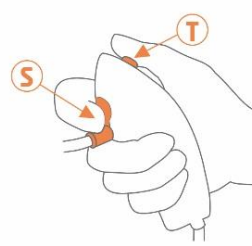


Figure 2. Inspiration



Figure 3. Expiration

T = thumb hole, S = index finger hole

Flow setting (L/min)	Tidal volume (ml) after 1 second inspiration
2	33
4	67
6	100
10	167
12	200
15	250

Table 1. Tidal volume at different inspiratory flow settings