



The superior airway clearance device. | Boulder, CO



The Vital Cough is the only therapy that loosens and removes tracheobronchial secretions. The Vital Cough is a noninvasive therapy that is a safe alternative to invasive suctioning. The easy to use Vital Cough is designed for patients and caregivers and will simulate a cough to remove secretions in patients with compromised peak cough flow < 6L/sec. The Vital Cough is intended to be used in at home care, nursing care environment, rehabilitation facility or hospital.

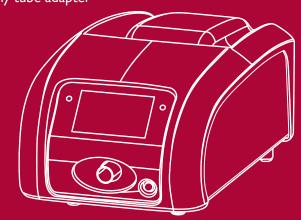
The Vital Cough is to provide positive insufflatory pressure (INHALE) to the airways with the intended goal of inflating the lungs, and then rapidly shifting to providing negative exsufflatory pressure (EXHALE) with the intended goal of rapidly deflating the lungs to simulate a high expiratory flow thus simulating an effective patient cough. Examples of patients that will benefit from the Vital Cough: Muscular dystrophy, Spinal muscular atrophy, Amyotrophic lateral sclerosis, Spinal cord injuries, Myasthenia gravis, Post polio, and COPD patients with a weak and ineffective cough.

Indication for Use For use on patients unable to cough or clear secretions effectively due to reduced peak cough expiratory flow, resulting from high spinal cord injuries, neuromuscular deficits or severe fatigue associated with intrinsic lung disease. It may be used with a facemask, mouthpiece, or an adapter to a patient's endotracheal tube or tracheostomy tube. For use on adult or pediatric patients.

**Patient Use** Adult and pediatric Home care, acute and intensive care and other indications under a physician's supervision.

## **KEY FEATURES:**

- Flutter oscillator valve variable 0-20 Hz to assist in dislodging thick retained secretions
- Lung recruitment, (PEEP) resting positive pressure mode from 0-15 cm H2O
- Use with mouthpiece, face mask, or standard endotracheal/tracheostomy tube adapter
- Color touch screen user interface and output display
- Positive pressure (Inhale) >50 cm H<sub>2</sub>O
- Negative pressure (Exhale) >50 cm H<sub>2</sub>O
- Maximum Exhalation Flow (@ 50 cm H<sub>2</sub>O) >6 liters/second
- · Air Flow: high, medium, low
- Automatic mode or manual
- Counts number of treatment cycles: 0-50
- Lightweight 11.5 pounds, 15.68"L x 9.96"L x 7.39"H
- Accessories: carrying case, stand, 12V light weight inverter (auto use)
- Power: 110/220 VAC
- I year warranty



## MI-E Comparison Table

Feature I	Emerson Cough Assist	Dima Italia Pegaso Cough	Vital Cough
Classification	Non-continuous Ventilator (IPPB), Class II, 868.5905 Product Code: 73 NHJ Anesthesiology Panel	Non-continuous Ventilator (IPPB), Class II, 868.5905 Product Code: 73 NHJ Anesthesiology Panel	Non-continuous Ventilator (IPPB), Class II, 868.5905 Product Code: 73 NHJ Anesthesiology Panel
Use settings	Home, hospital/institution	Home, hospital/institution	Home, hospital/institution
Maximum Positive Pressure	+60 cm H <sub>2</sub> O (44 mm Hg)	+70 cm H <sub>2</sub> O	+50 cm H <sub>2</sub> O
Maximum Negative Pressure	-60 cm H <sub>2</sub> O (44 mm Hg)	-70 cm H <sub>2</sub> O	-50 cm H <sub>2</sub> O
Maximum Exhalation Flow (@ 50cmH <sub>2</sub> O)	>6 liters/second	>6 liters/second	>6 liters/second
Mode of Operation	Automatic and manual timing Mechanical switch controlled	Automatic and manual modes Microprocessor controlled	Automatic and manual modes Microprocessor controlled
Inhalation, Exhalation, and Pause Times	0 to 5 seconds	0.1 to 9.9 seconds	0 to 5 seconds
Flutter Feature	N/A	N/A	0-20 Hz during exhale (Adjustable)
Positive airway Pressure that is kept above atmospheric pressure	N/A	N/A	0-15 cmH <sub>2</sub> O (Adjustable)
Blower	Two speed, High & Low, centrifugal with AC/DC brush motor	Brushless blower, High, Medium and Low speeds	Brushless blower, High, Medium and Low speeds
Visualization/ Setting	Mechanical Gauge/knob	LCD two color Display /keyboard buttons	LCD 24bit color display/ with touch screen
Power Supply Frequency	60 Hz	50/60 Hz	50/60 Hz
Power Supply Voltage	110V or 220V	110V or 230V	110/230V Universal
Weight	24 pounds	9.9 pounds	II.5 pounds
Unit dimensions	16.5"L × 11"W × 11.5"H	11.4"L × 10.6"W × 9.8"H	15.68"L × 9.96"W × 7.39"H
Line Voltage	110-230Vac	110-230Vac	110-230V

## MI-E Comparison Table (continued)

Feature	Emerson Cough Assist	Dima Italia Pegaso Cough	Vital Cough
Humidity Operating humidity range Storage humidity range	10-90%	10-90%	10-90%
Safety Class Standards	BF type equipment EN60601-1 EN60601-1-2 EN60601-1-4	BF IEC 60601-1 IEC 60601-1-2 IEC 60601-1-4 EMC IEC 6060101-2, FCC Part 15, Class B	Class II Type BF IEC 60601-1: 2005 IEC 60601-1-2 IEC 60601-1-4
CE Conformity	Risk Class IIb CE 0413	Risk Class IIb 93/42/EEC Directive CE 0476	Risk Class IIb Design to meet: 93/42/EEC
Signaling of Alarm	Power Failure Others Unknown	Power Failure No pressure High pressure Valve fault Low pressure Fuse failure	High pressure High internal temperature High blower temperature
Contraindications	Bullous emphysema Pneumothorax Pneumo-mediastinum Barotrauma	Bullous lung disease Pneumothorax Extremely low blood pressure Pneumocephalus or pre-existing CSF leaks or head trauma Severe cardiac rhythm disturbances Acute facial trauma	Bullous lung disease Pneumothorax Extremely low blood pressure Pneumocephalus or pre-existing CSF leaks or head trauma Severe cardiac rhythm disturbances Acute facial trauma
Warranty	l year	l year	l year



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