

More than just a comfortable cough

Taking airway clearance to the next level



Flexible, customizable loosening and clearing therapy



An effective cough is critical to keep airways clear.

Clear airways are critical to proper ventilation and ventilation/perfusion ratio.

For those who are unable to cough or effectively clear secretions, deep suctioning is often used to clear the airways. Unfortunately, invasive suction methods can be uncomfortable for the patient and have been linked to complications such as hypoxia, tissue damage and infection.¹

The CoughAssist T70 provides an effective, yet remarkably gentle, noninvasive secretion clearance alternative for use in the hospital and at home. It clears airways for longer periods of time than tracheal suctioning, and with fewer complications.²

More and more scientific societies are specifically recommending the use of mechanical in-exsufflation technique for airway clearance management.^{3,4,5}

Enhanced functionality

As a direct result of the feedback and experience of our global clinician network, the CoughAssist T70 now comes with a set of new functionalities, such as;

- Oscillation Capability
- Advanced Auto Mode

The CoughAssist T70 - delivering **airway clearance therapy** to meet your patient's needs



Exceptional usability and comfort

- An intuitive color interface makes it easy to assess treatment and fine-tune device settings to improve therapy efficacy and comfort.
- AC or battery powered, the CoughAssist T70 is a truly portable solution, offering patients increased freedom and support.
- · Detachable battery delivers one day of therapy.6
- CoughAssist T70 and Trilogy Series ventilators share the same detachable battery unit.

Flexibility in delivering therapy

- Three highly customizable therapy modes accommodate different patient conditions, whether for a single patient at home, or for multiple patients treated within the hospital.
- In addition to the traditional Manual and Auto modes, the Advanced Auto Mode increases the airway clearance therapy options.
- The Manual Override capability allows the clinician to quickly switch from Auto to Manual therapy when unexpected clinical situations occur.
- The foot pedal allows the caregiver to manually perform a chest thrust while holding the interface.



Therapy provided by the CoughAssist has been clinically proven to increase peak cough expiratory flows and reduce recurrent respiratory infections. ^{7,8}



Key features and technology

Cough-Trak algorithm

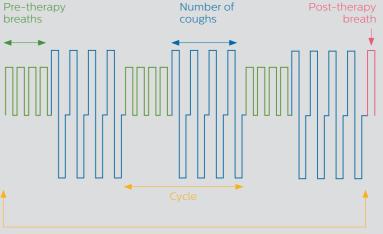
The integrated Cough-Trak algorithm aids device titration and patient synchronization by allowing the patient to trigger therapy through inhalation, helping both comfort and compliance.

Oscillation

The CoughAssist T70 mobilizes and loosens secretions by providing high frequency oscillatory vibrations while gradually applying a positive pressure to the airway, then rapidly shifting to a negative pressure. Adjustable oscillation levels enhance mobilization and increase the benefits of therapy.

Advanced Auto Mode

The Advanced Auto Mode allows the clinician to set a number of successive insufflations (pre-therapy breaths) prior to the cough therapy; this therapy pattern can be repeated up to 10 times as defined by the number of cycles. The clinician also has the option to end the sequence on a single insufflation by enabling the 'Post-Therapy Breath' setting. Advanced Auto Mode can help enhance recruitment as part of the airway clearance therapy and is suitable for use with all CoughAssist T70 patients.

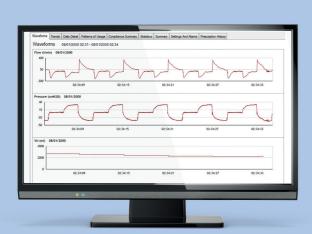


Number of cycles





Data management



Data management tools help assess therapy efficacy and adapt settings as required, or as a disease progresses.

At the end of each cough cycle, the built in color display shows real-time therapy data including:

- Insufflation Volume monitoring, which helps to determine the proper inspiratory pressure needed to deliver a deep inhalation
- Peak Cough Flow monitoring, which allows adjustment of the expiratory pressure needed to deliver an effective cough
- SpO₂ and heart rate monitoring at rest, which gives instant feedback on therapy efficacy.

The removable SD card records in depth therapy data for extended follow-up using DirectView software.

Specifications

	Manual mode	Automatic mode	Advanced Auto Mode*	
Preset		1, 2, 3		
Cough-Trak	N/A	OFF/ON	OFF/ON	
Pre-Therapy Breaths	N/A	N/A	OFF, 1 to 10	
Pre-Therapy Pressure	N/A	N/A	0 to +70 cmH ₂ O,	
			in increments of 1 cmH ₂ O	
Pre-Therapy Flow	N/A	N/A	Low/Medium/High	
Pre-Therapy Time	N/A	N/A	0-5 sec., in increments of 0.1 sec.	
Pre-Therapy Pause	N/A	N/A	0-5 sec., in increments of 0.1 sec.	
			Only if Cough-Trak is OFF	
Number of Coughs	N/A	N/A	1 to 15	
Inhale Pressure	0 to 70 cmH ₂ O, in increments of 1 cmH ₂ O			
Inhale Flow	Low/Medium/High			
Inhale Time	N/A 0 to 5 sec., in increments of 0.1 sec.			
Exhale Pressure	0 to -70 cmH ₂ O, in increments of 1 cmH ₂ O			
Exhale Time	N/A	N/A 0 to 5 sec., in increments of 0.1 sec.		
Pause Time	N/A	N/A 0 to 5 sec., in increments of 0.1 sec. Only if Cough-Trak is OFF		
Oscillation	OFF/Inhale/Exhale/Both			
Frequency	1 to 20 Hz, in increments of 1 Hz. Only available if Oscillation is activated.			
Amplitude	1 to 10 cmH ₂ O, in increments of 1 cmH ₂ O. Only available if Oscillation is activated.			
Number of Cycles	N/A	N/A	1 to 10	
Post-Therapy Breath	N/A	N/A	ON/OFF	
AC voltage source	100 to 240 VAC, 50/60 Hz			
DC power source	12 VDC			
Dimensions (cm)	29.2 cm W x 23.1 cm H x 19.0 cm D / 11.5" W x 9.1" H x 7.5" D			
Weight	3.8 kg (8.4 lbs) / 4.3 kg (9.4 lbs) with detachable battery installed			

^{*} Only with firmware 1.09 and beyond

Ordering information

Device descriptionPart numberCoughAssist T701098160

Includes device without battery, SD card, patient circuit large 6 ft, carry bag, AC power cord, air filter and a circuit retainer

Accessories	Part number	Patient circuit kits
Oximetry	1099034	
interface cable		Patient circuit infant**
Foot pedal	1059017	Patient circuit toddler**
Roll stand	1098655	Patient circuit small**
Circuit retainer	1099035	Patient circuit medium**
Carry bag	1098884	Patient circuit large**
Water trap	1098720	Patient circuit trach***
Detachable battery	1043570	Patient circuit mouthpiece

Patient circuit kits	Part number	
	6 ft tubing	9 ft tubing
Patient circuit infant**	1090830	1098403
Patient circuit toddler**	1090831	1098404
Patient circuit small**	1090832	1098405
Patient circuit medium**	1090833	1098407
Patient circuit large**	1090834	1098408
Patient circuit trach***	1090835	1098409
Patient circuit mouthpiece***	1090836	1098410

^{**} Contains mask, tubing, mask adapter and bacterial filter

^{***} Contains interface (mouthpiece or trach adapter), tubing and bacterial filter

References:

- Invasive suction linked to complications such as hypoxia, tissue damage and infection. AARC Clinical Practice Guideline. Endotracheal suctioning of mechanically ventilated adults and children with artificial airways. Respiratory Care 1993;38(5)500-504
- CoughAssist therapy keeping airways clear longer than trached suction and with fewer complications. Sancho J, Servera E. Vergara P, Marin J. Mechanical in-exsufflation vs tracheal suctioning via tracheostomy tubes for patients with amyotrophic lateral sclerosis: a pilot study. Am J Phys Med Rehabil 2003;82(10)750-753
- 3. Guidelines for Respiratory Management of Children with Neuromuscular Weakness, British Thoracic Society. Thorax July 2012 67: i1-i40.

- 4. Home Mechanical Ventilation, A Canadian Thoracic Society Clinical Practice Guideline, Can Respir J Vol 18 No 4 July/August 2011
- AARC Clinical Practice Guideline: Effectiveness of Non Pharmacologic Airway Clearance Therapies in Hospitalized Patients, Respiratory Care Journal, Dec 2013, Vol 58 N°12
- One day of therapy is defined as performing a typical treatment 4 times. A typical treatment being 4 to 6 sequences of 4 to 6 cough cycles at +/-40cmH₂O
- 7. CoughAssist therapy clinically proven to increase Peak Cough Flows. Chatwin M, Ross E, Hart N, Nickol AH, Polkey MI, Simmonds AK. Cough Augmentation with Mechanical Insufflation/Exsufflation in Patients with Neuromuscular Weakness. Eur Respir J: March 2003; 21(3):502-508
- 8. CoughAssist therapy proven to reduce recurrent respiratory infections. Alice C. Tzeng and John R. Bach. Prevention of Pulmonary Morbidity or Patients with Neuromuscular Disease. Chest 2000;118:1390–1396. DOI 10. 1378/Chest 118.5.1390

