



## ECHO Percussor Instructions For Use



### INDICATIONS

ECHO Percussor is intended to be used on adult and pediatric patients with retaining mucus, unproductive cough or deep sputum in a home care environment. This device utilizes vibration force to loosen mucus, and can be used for lung training as well.

### PRINCIPLE OF OPERATION

When the user exhales through the ECHO Percussor, the expiratory pressure will vibrate the steel ball in the circular cone, which helps to loosen mucus from the airway walls. During the exhalation phase, the loosened mucus moves up from the airway and keeps the airway clear, preventing trapping of sputum in the airway causing infection.

At exhalation the flow indicator raises to indicate the strength of airflow. In addition to that:

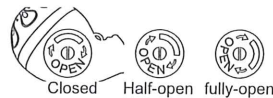
1. Tilting the device and adjusting the size of the air release port on the side with the knob can alter the oscillation frequency.
2. Adjusting the size of the air release port on the side with the knob can also change the air force required to use the device for lung training.

### WARNINGS AND CAUTIONS

- The ECHO Percussor is intended for single patient use only. Do not use on multiple patients.
- Inspect the product for missing parts or damage before use. If present, do not use.
- Patients with pneumothorax, tuberculosis, coughing blood, aneurysms or vascular injury should not use this device.
- Correct use of the Percussor correctly should not induce any side effects. But hyperventilation may cause dizziness or numbness in lip and arm. If this happens, stop using the device and breathe normally until the symptom subsides. If the discomfort persists, please consult your physician.
- Intended for use with instruction from qualified medical personnel.
- Children's use of this lung trainer should be accompanied by adult.

### DIRECTIONS FOR USE

1. Connect one side of the collapsible tubing to the mouthpiece, and the other side to the ECHO Percussor.  
**Note:** For ECHO Percussor Kit with Tracheal T, connect the Tee connector to the tubing before attaching it to the percussor. For ECHO Percussor with Mask, attach the mask to the swivel end of the Tee connector.
2. Turn the knob on the side until the release port is fully sealed (as shown in the illustration).



3. When using the ECHO Percussor, the patient should be seated with the back straight. Then adjust the length and angle of the tube or percussor as needed.  
**Note:** For patients who are unable to maintain a seated position, the angle of corrugated tube can be adjusted to accommodate the patient's position.
4. Before using the ECHO Percussor, relax the abdominal and chest muscles and breathe slowly and normally.
5. If a mouthpiece is used, place the mouthpiece in the mouth with lips closed firmly around the mouthpiece. Take a deep breath from the nose and exhale through the mouthpiece. During exhalation, the user should feel vibration in the chest. Repeat the breathing pattern 8 to 10 times.
6. Remove the device and cough to clear mucus. Rest for a while before using the device again.  
**Warning:** If you experience chest pain, shortness of breath or blood cough, please stop using the ECHO Percussor immediately and contact your physician.

7. The duration for each successful mucus clearance session is normally about 5 to 15 minutes. However, each patient's situation should be assessed differently and patients should consult their physician for advice.

- Note:**
1. Bacteria filter and Tee Valve can be used with the device to minimize the risk of cross contamination.
  2. During use, if there is a strong need to cough, please remove the percussor.
  3. If exhalation through the percussor becomes difficult, the knob on the side of the percussor can be adjusted to allow more room for air to be released. Tilting the percussor to one side with the flow indicator extending out from the cover will also enable more air to be released to reduce the level of difficulty for breathing out through the device.
  4. Each percussor comes with a small handy strap. To use, simply attach the strap to the stropholder. Optional neck strap with safety latch is also available as an additional item.

### CLEANING

The ECHO Percussor should be cleaned after each session.

1. Remove and discard the used mouthpiece, collapsible tubing and T piece.
2. Press on the cover and turn counterclockwise to open it. Then remove the circular cone and stainless steel ball.
3. Remove mucus and moisture on the surface of the components. Soak all components in soap water or mild detergent and rinse with boiled water or distilled water. Wipe with clean cloth and allow it to air dry.
4. Reassemble the components. Rotate the cover clockwise to until a "click" sound is heard.  
**Warning:** The collapsible tubing cannot be reprocessed for reuse. Reuse of collapsible tubing may result in cross contamination or infection.

**Note:** This cleaning procedure is for single patient use in a homecare environment. For additional disinfection processing, please use 70% alcohol to wipe the components. If the device is used in the hospital or clinical setting, please follow the regulations and/or procedures outlined by each institution.

### SPECIFICATIONS

ECHO Percussor consists of the following parts: handle (PC), cover (PC), knob (PE), stainless steel ball, circular cone (ABS), flow indicator (ABS).

Accessories: Collapsible tubing 10cm (PP), mouthpiece (PE), neck strap.

### ORDER INFORMATION

REF	Product Description	Packaging
DK11	ECHO Percussor	1 set/box,48 box/ctn
DK12	ECHO Percussor with Tracheal-T	1 set/box,48 box/ctn
DK13	ECHO Percussor with Mask size 0	1 set/box,48 box/ctn
DK14	ECHO Percussor with Mask size 1	1 set/box,48 box/ctn
DK1-11	Mouthpiece with Extension Tube, 10cm	1 set/box,50 box/ctn
DK1-12	Swivel Tracheal T-valve set	1 set/box,50 box/ctn
5120	Sil-Flex™ Silicone Mask size 0	1 set/box,12 box/ctn
5121	Sil-Flex™ Silicone Mask size 1	1 set/box,12 box/ctn
56001	Dofin™ Neck Strap	1 set/pkg, 25 pkgs/box