# Achieva

## Portable Volume Ventilator with Pressure Support

- Lightweight, compact design for easy portability.
- Exceptional battery life for extended ambulation.
- Internal dial-in PEEP for convenient ventilator operation.
- Time-limited pressure control ventilation for supporting uncuffed airways.
- I Internal O<sub>2</sub> blending for convenient and accurate delivery of 21-100% F<sub>i</sub>O<sub>2</sub>.
- Flow triggering (with optional pressure trigger) for optimal patient responsiveness.
- I Internal memory with external modem connections for accessing stored data, providing more efficient patient outcomes management.
- Models at three capability levels offer cost effective care for all patients from the hospital to the home.





### SPECIFICATIONS

#### Power Line

I 110/240 VAC, 50/60 Hz, universal AC input

#### Power Usage

- I Maximum: 75 W
- I Nominal: 10 W
- External Battery: Approx. 20 hours operation under normal load
- Internal Battery: At least 4 hours operation under normal load; backup use only

#### Type - Positive Pressure Volume Ventilator

- I Motor: Brushless induction
- Pump: Piston, 50 to 2200 ml tidal volume

#### Front Panel Controls/Connections

- 1 Alarm Silence/Reset: Push button to pre-silence. silence alarm or to reset; alarm test
- Battery Test: Push button to show charge level on lower window of Patient Pressure meter
- Standby: Used to place the ventilator in the non-ventilate state
- Ventilate: Enables the ventilator to deliver air to the patient
- Mode Setting Switches: Volume, Inspiratory Time, Sensitivity, Breath Rate, Pressure Support, PEEP, Low Pressure, High Pressure, F1O2
- Menus/Esc: Activates and deactivates the menu on the ventilator's display
- Start/Enter: Used to accept the currently flashing parameter as the new setting. Activates display
- Up and Down Arrow Keys: Increases or decreases the parameter settings or menu screens. Pressing when the sub menu is not active and a parameter has not been selected will cause the last alarm to be displayed
- Patient Pressure Port: Connection to the proximal pressure line of the patient circuit
- Patient Air: 22mm O.D/15mm I.D
- Exhalation Valve Port: Connection to the exhalation valve of the patient circuit

#### Front Panel Settings

- Volume: Adjustable from 50 to 2200 ml in 10 ml steps (up to 1750 ml in SIMV)
- Inspiratory Time: Set time from 0.2 to 5.0 seconds in increments of 0.1 second
- Sensitivity: Set flow from 3 to 25 LPM in 1 LPM increments. Set pressure from 1 to 15 cm H<sub>2</sub>O/hPa in 1 cm H<sub>2</sub>O/hPa increments
- Breath Rate: Set breathing rate: 1 to 80 BPM in increments of 1 BPM
- Pressure: Set for 0 to 50 cm H<sub>2</sub>O/hPa in 1 cm
- H<sub>2</sub>O/hPa increments
- PEEP: Set for 0 and 3 to 20 cm H<sub>2</sub>O/hPa in 1 cm H<sub>2</sub>O/hPa increments

- I Low Pressure: Set for 1 to 59 cm H<sub>2</sub>O/hPa in 1 cm H<sub>2</sub>O/hPa increments
- High Pressure: Set for 2 to 80 cm H<sub>2</sub>O/hPa in 1 cm H<sub>2</sub>O/hPa increments
- I O, Level: Set 21% to 100% for tidal volumes greater than or equal to 90 ml, 21% to 70% for tidal volumes less than 90 ml in 1% increments

#### Rear Panel Components

- I Inlet Filter: Intake for patient air; screw off cap for filter change, 98% efficient at 0.3 microns
- External Battery: Connection for 24 VDC battery
- Communication Port: For computer, printer or external modem
- Nurse Call Port: Connection to nurse call station
- Power Entry Module: For AC power cord
- O, Port: 9/16-18, DISS 1240 THD Other connections upon request

#### **Environment**

- Operating: 5°C to 40°C (41°F to 104°F), 10% to 90% RH non-condensing
- Storage: -20°C to 50°C (-4°F to 122°F), 10% to 90% RH non-condensing; allow at least 1 hour temperature stabilisation before use when moving from non-operating to operating environment; the battery must be recharged every 30 days

#### Maintenance

Preventative maintenance by qualified professional every 6000 hours or recertification every 12 months, whichever comes first

#### **Dimensions**

1 27.3 cm x 33.8 cm x 39.6 cm (10.75" H x 13.30" W x 15.60" D)

#### Weight

Less than 14,5 kg (32 lbs)

#### Resistance Factor

Maximum of 4.5 cm H<sub>2</sub>O/hPa at 60 LPM

#### Emergency Pressure Relief

Approx. 90 ± 10 cm H<sub>2</sub>O/hPa

#### Flow

1 2.0 LPM to 150 LPM (averaged)

#### ORDERING INFORMATION

Y-ACH-UK	Achieva™
Y-ACH-X-UK	Achieva >
Y-ACH-PS-UK	Achieva F

#### Required Accessories

Y-6267	Reusable adult circuit - metal
Y-6268	Reusable adult circuit - plastic
Y-6463	Disposable adult circuit
Y-6464	Disposable paediatric circuit
L-6106	Air inlet filter
L-6108	Bacteria filter (disposable)

#### Optional Accessories

Y-ACH-RG	Report Generator Softwar
Y-6441-ACH	Ventilator cart
Y-CGVP24	External battery pack
Y-6353	Exhalation valve
L-6202	O <sub>2</sub> enrichment kit
L-6861	Trach support arm

Note: Use only Mallinckrodt-approved accessories with the

Achieva ventilators are manufactured in Minneapolis, MN U.S.A.

#### MODEL COMPARISON

	Achieva	Achieva X	Achieva PS
Assist/Control	Yes	Yes	Yes
- with Pressure Control	Yes	Yes	Yes
SIMV	Yes	Yes	Yes
- with CPAP	Yes	Yes	Yes
- with Pressure Support	No	No	Yes
Spontaneous (Pressure Support)	No	No	Yes
- with CPAP	No	No	Yes
Internal O <sub>2</sub> Blender	No	Yes	Yes















