



# TV-100 VENTILATOR

Infant - Pediatric - Adult / ICU-Transport



One Vent - All Patients - Anywhere  
Superior Portability, Flexibility, and Performance

Bio-Med Devices' industry leading TV-100 Ventilator offers the latest technology, and provides the modes and performance of a full size ICU ventilator in a compact design that is ideal for transport.

### Full FiO<sub>2</sub> Capability

The TV-100 features an internal compressor which provides air supply without the need for external pressurized gas supplies.

Oxygen may also be provided from a 50 psi gas source and is delivered via an internal blender in O<sub>2</sub> concentrations from 21 - 100%.

### Dependable & Easy to Use

The TV-100 features dual, hot swap capable, rechargeable batteries that

allow for uninterrupted use on the go. The TV-100 is capable of 7 to 11 hours of continuous battery operation with fully charged batteries.

The TV-100 offers the user a simple set-up assistant to get up and running fast, when seconds count. The user can also take full advantage of advanced features like waveform graphs and loop graphs to provide complete patient care.

### Unmatched Capability

The TV-100 offers the capability to ventilate the smallest of premature infants to the largest of adult patients. This wide range of use, as well as the inclusion of non-invasive modes, sets the TV-100 apart.

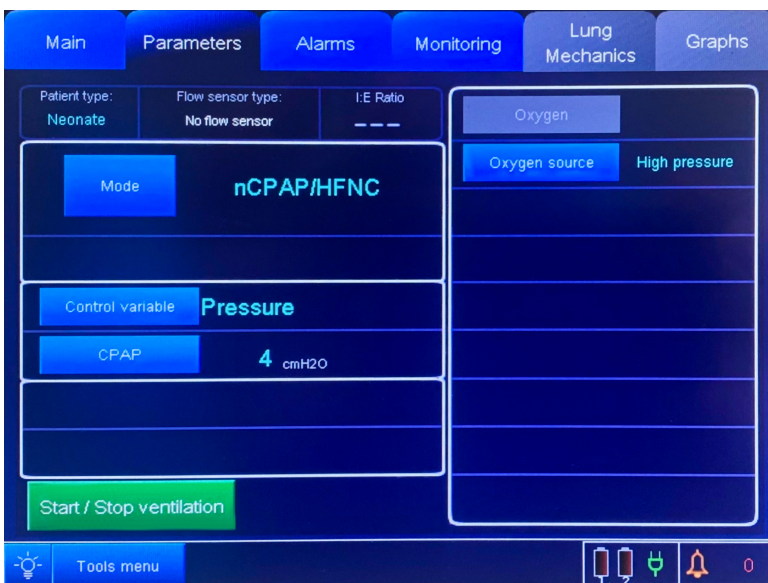


## NIV Mode

- A diverse mode that can be used for many non-invasive applications
  - Differing inspiratory and expiratory pressures (IPAP and EPAP)
  - With or without a set rate
  - With or without apnea backup
  - Can be used with a vast array of neonatal nasal CPAP interfaces

## PRVC Mode

- Pressure Regulated Volume Control
- Inspiratory pressure adjusts up or down to maintain a set target tidal volume
- Volume guarantee



## HFNC/nCPAP

- Provide non-invasive nCPAP for infants
- Use this mode to provide flow to a resuscitation bag prior to intubation
- Provide flow to a high flow cannula (up to 60 lpm for adults)
- Provide flow to a low flow neonatal cannula

## TV-100 Meets Transport Requirements

Tested to and complies with the Emergency Medical Services standard 60601-1-12. Testing includes water ingress (rated to IP44), extreme vibration, 30G forces, EMI/RFI, and drop test from a height of 75 cm to concrete onto all six sides of the ventilator.

The TV-100 has been tested and passed important clauses of the DO-160G aviation standard.

Your choice for transport ventilation, the TV-100 uses the latest in smart battery technology with built-in charge intelligence and safety features including protection from over-charge, deep discharge, and short circuit overload making it the frontrunner for safety in air transport.

Automatic barometric compensation for altitude or cabin pressure changes up to 12,000 feet.



Pictured Above:  
Ventilator Roll Stand  
(BMD Part Number 1060T)  
with 2 E-Cylinder Tank Brackets  
(BMD Part Number 1061T)



Pictured Left:  
TV-100 Bed Rail Bracket  
(BMD Part Number 2013BR)



Model 5500 Neonatal-Adult

# TV-100

## Ventilation Modes

Volume Assist Control  
 Volume-SIMV  
 PRVC  
 Pressure-Assist Control  
 Pressure-SIMV  
 NIV  
 HFNC  
 CPAP-Volume  
 Apnea Backup  
 nCPAP/HFNC

## Monitors/Alarms

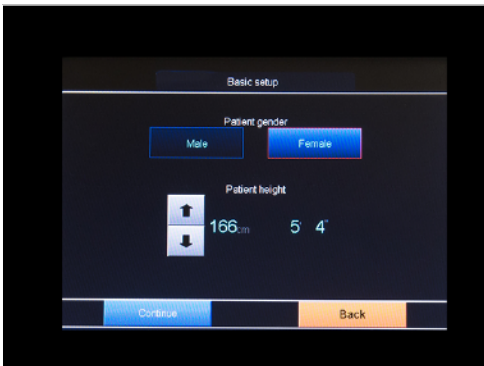
Rate  
 Oxygen % (FiO<sub>2</sub>)  
 PEEP  
 EPAP  
 IPAP  
 Apnea  
 VTe  
 MVE  
 Peak Pressure  
 Mean Pressure  
 Low Battery  
 I:E Ratio

## Included Accessories

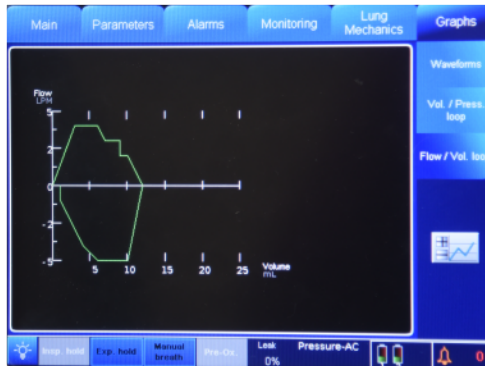
TV-100 Operator's Manual  
 Disposable Adult Circuit  
 Disposable Infant Circuit  
 Adult Test Lung  
 Infant Test Lung  
 Pediatric/Adult Flow Sensor  
 Infant Flow Sensor  
 Disposable Patient Filter  
 O<sub>2</sub> High Pressure Supply Hose  
 TV-100 Power Supply  
 (with Power Cord)

## Optional Accessories

Disposable Pediatric Circuit  
 Disposable Dual Limb Adult Circuit  
 Reusable Infant Circuit  
 Reusable Pediatric Circuit  
 Reusable Adult Circuit  
 O<sub>2</sub> Filter/Water Trap  
 Pediatric Test Lung  
 TV-100 Battery  
 TV-100 Battery Charger  
 Roll Stand  
 Bed Rail Bracket  
 DC 12-30 Volts Cable  
 Carry Bag



Set-Up Assistant



Loop Graph



Lung Mechanics



Battery Compartment

## Physical Characteristics

Size: 12.8" x 11.9" x 7.6" (32.5 cm x 30.2 cm x 19.3 cm)  
 Weight: 15.6 lbs. (7.1 kg) (Without AC Adapter)

## Specifications

Parameter	Range
Apnea Alarm.....	5 - 60 seconds
I:E Ratio.....	3:1 to 1:99
Oxygen.....	21 - 100%
Pressure Support.....	1 - 60 cmH <sub>2</sub> O
Rate (Pediatric/Adult).....	5 - 100 bpm
Rate (Neonatal).....	5 - 150 bpm
SIMV Rate.....	1 - 50 bpm
Expiratory Time.....	0 - 100 seconds
Inspiratory Time.....	0.1 - 3.0 seconds
Flow Trigger.....	0.5 - 30 lpm
Pressure Trigger relative to baseline	-0.2 to -10 cmH <sub>2</sub> O
Purge Flow.....	40 - 60 ml/min
Base Flow (Pediatric/Adult).....	6 lpm
Base Flow (Neonatal).....	2.5 lpm
Flow .....	0 - 180 lpm
PEEP/CPAP (Pediatric/Adult).....	0 - 35 cmH <sub>2</sub> O
PEEP (Neonatal).....	0 - 25 cmH <sub>2</sub> O
EPAP. (Pediatric/Adult).....	0- 35 cmH <sub>2</sub> O
EPAP (Neonatal).....	0-25cmH <sub>2</sub> O
IPAP.....	3 - 40 cmH <sub>2</sub> O
PIP (Pediatric/Adult).....	0 - 99 cmH <sub>2</sub> O
PIP (Neonatal).....	0 - 60 cmH <sub>2</sub> O
Tidal Volume (Pediatric/Adult)...	75 - 2500 ml
Tidal Volume (Neonatal).....	2 - 100 ml
Pop-off Relief Valve (Ped/Adult)	100 cmH <sub>2</sub> O
Pop-off Relief Valve (Neonatal)...	60 cmH <sub>2</sub> O



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 Specifications subject to change without notice