



AccuVent 200

Small Animal Ventilator

The AccuVent by Notting Hill Devices (NHD) is a highly versatile small animal ventilator that provides respiratory and pre-clinical researchers with exceptional accuracy and stability.

Using pioneering dual-chamber technology, the device has no moving parts besides the electromechanical valves – no traditional pistons. Pressure is precisely controlled for both inspiration and expiration, which allows for numerous advantages when compared with other ventilators.

ADAPTABLE AND CUSTOMISABLE

Designed with novel research in mind, the AccuVent accommodates a multitude of new protocols – all without the need to switch equipment or swap parts.

It's capable of ventilating numerous small laboratory animals, measuring air pressure and flow, and ventilation across a range of volume, pressure and respiratory rates. It's also the only high-frequency ventilator on the market.

LIVE FEEDBACK AND INTUITIVE SOFTWARE

The device offers constant, live feedback to researchers thanks to the sophisticated NHD software on which it runs.

It operates with a simple-to-use control software interface (which works with Windows XP, Vista, 7, 8.1 and 10) and features programmable, storable macros for the most complex ventilation strategies.

DEPENDABLE, PRECISE AND GENTLE

Due to its novel design and interaction with 4Dx software, the NHD AccuVent is significantly more reliable than other ventilators on the market. It's designed for extremely high accuracy – from one experiment to the next, and from one device to the next.

Ultra-precise control and the removal of pistons (delivering set volumes) also means exceptionally safe experiments; gentleness to animals is a central feature of the device.

The AccuVent offers increased change response performance for inspiration, peak inspiration and expiratory pressure times, through the use of fast switching controller valves. Users can expect respiratory rates up to 30Hz and a maximum breath rate of 1800 BPM.



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KEY FEATURES

Easy to operate
Pioneering piston-free design
Superior operational flexibility
Capacity to measure airway pressure and flow
Capacity to conduct high-frequency ventilation
Independent inspiratory and expiratory pressure systems
Pressure and volume based control options
Negative pressure setting option
Wide range of tidal volume and respiratory rates
Compact, transportable
Computer controlled
User-defined breathing pattern macros
Option to synchronise with external devices and inputs
Pneumotachometer included
Advanced timing control functionality

PRODUCT SPECIFICATIONS

Ventilator Unit Size	10(d) x 9(w) x 5.5(h) in ; 250(d) x 230(w) x 140(h) mm
Respiratory Rate Range	≤33Hz (at 15ms Inspiration, 15ms Expiration)
Tidal Volume Range	No limit (limited only by flow rate)
Inspiration Time Range	≥15ms
Pressure Control Range	-10cmH ₂ O to +50cmH ₂ O
Analog Pressure Output Voltage	0.125V to 4.88V; (0.029 V/cmH ₂ O)
Remote Control Inputs/Outputs	Inspiration, Expiration Trigger outputs (TTL) <i>Additional Inputs/Outputs available as optional add-on</i>
Power Requirements	100-240V AC, 50-60Hz, 1.0A
Operating System Requirements	Windows XP, Vista and 7, 8.1, 10
Please contact NHD for a customised quote if these specifications do not meet your needs	

OPTIONAL FEATURES

Intubation Light	Helps the user locate the trachea to insert a cannula in as it is often difficult to distinguish between the trachea and the oesophagus in small animals.	
External Pumps	For use in rooms without pressurised air and vacuum lines.	
Nebulizer Control Add-on	Controls an Aeroneb® Lab Nebuliser (sold separately). Can be modified to control other nebulisers. Contact Notting Hill Devices for additional details.	
Customer Specific Add-ons	Through the expertise of 4Dx, Notting Hill Devices can develop software to suit your specialised needs. Contact us to discuss your requirements	