DSI™

Better Data. Better Science.

# FinePointe for Non-Invasive Airway Mechanics (NAM)

## Features

- **Continuously measures specific airway resistance in conscious animals**
- **Automated calibration**
- **Aerosol delivery and control**
- **Allay™ chamber design significantly reduces subject loading and acclimation time**
- **Chambers incorporate the patented Halcyon® noise-suppression design**
- **Scalable for high throughput - easily attach 12 sites to a single computer**
- **Each USB connection to computer supports 2 or 4 chambers**
- **Uses Allay™ Restraint for maximum subject comfort**

DSI's FinePointe Series NAM sites are used to acquire specific airway resistance ($sR_{aw}$) in conscious subjects. Scientifically established and accepted for over 30 years, this technique measures $sR_{aw}$ by monitoring the phase delay between the nasal and thoracic flows[1]. This system is ideal for researchers interested in airway resistance without anesthesia.

The subject is restrained in a special chamber which allows the independent measurement of nasal and thoracic flows. The airway resistance is related to the phase difference between these two flows. This is a direct measurement of airway resistance.

[1] *BE Pennock, CP Cox, RM Rogers, WA Cain, and JH Wells. A noninvasive technique for measurement of changes in specific airway resistance. Journal of Applied Physiology: Respirat. Environ. Exercise Physiol. 46 (2): 399-406, 1979.*

### *Available for:*

Mice, Rats, Guinea Pigs

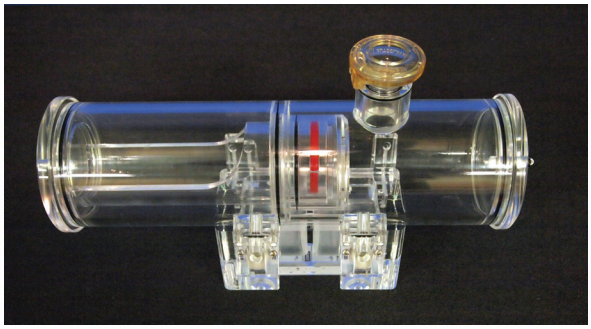
A typical single site system for mice, rats or guinea pigs includes a Buxco FinePointe NAM Controller and Table.


*The 2-site NAM station. The base is 15 cm high, the table top is approximately 45 x 40 cm. It accommodates 2 chambers—either mouse, rat, or guinea pig. Shown here are 2 mouse chambers.*

*Also available in the larger, 4-site version.*


*Buxco FinePointe Station software presenting data from a Buxco FinePointe NAM Site: reading thoracic, nasal, and volume signals. The bottom left of the screen displays the trend graphs for Tidal Volume and Specific Airway Resistance. The table displays the current numerical data derived from the signals presented above. Report measurement periods are highlighted in purple.*

*The mouse NAM plethysmograph*



*The rat plethysmograph fits onto the same footprint as the mouse plethysmograph, as does the guinea pig plethysmograph, making it possible to use only one table with several different sizes of plethysmographs.*