

# **Non-Invasive Blood Pressure**

Unique environmental control system and single tail cuff allows tail movement, minimizing stress in the animal subjects



The system includes the amplifier, cuff inflation device, warming chamber, touch screen for control of all parameters (auto calibration, inflation/deflation rates, tests per animal, true pulse recordings), tail cuff, restrainers and a spare parts package of all consumable items

- Test up to 200 animals at a time
- Sensor is MRI compatible
- Quick and accurate blood pressure measurement at temperatures as low as 32°C
- Highly sensitive photoelectric sensor for blood pressure detection
- Monitor, record, store or export real time systolic, diastolic, mean and heart rate
- Multi-channel system available

This revolutionary design brings non-invasive blood pressure testing to a new level — a true turn-key system for accurate, consistent blood pressure measurement on mice, rats or any other laboratory animal test subject.

It is a compact, simple yet versatile system that can test from one to 200 animals at a time with independent control of each channel. Simple daisy-chaining allows expansion of up to 200 independently controlled systems.

All components are built into one small unit — controls, inflation of tail cuff, warming environment with whisperquiet fans — providing an ideal system for teaching facilities and for the pharmaceutical industry when high throughput is a must.

Single animal systems are controlled from the touch screen, which allows keying in all necessary test setups. Touch screen control allows ease of operation, supplying automatic evaluation of test results — systolic, diastolic, mean and heart rate.

Data is collected, stored, displayed and can be transferred to the supplied memory stick. The USB interface allows for software control of multi-channel systems. For single animal systems, built-in software lets you view and export data. Reports are in an Excel-style format and may be easily exported.

No computer is required. However, the analog output may be interfaced with your own data acquisition software.

The system is easily cleaned. Removable trays are included with each system.

In addition to the standard one-year warranty on the system, tail cuff sensors have a lifetime warranty.



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### **How it Works**

Place an animal in the supplied restrainer, attach tail cuff, set the desired temperature of the warming chamber, select number of test cycles, press auto calibrate and run test. The tail cuffs require the minimum amount of heat to measure blood pressure. The average temperature for rats is 32°C and for mice 34°C.

The tail cuff design consists of a photoelectric cell, the most accurate method for obtaining tail cuff blood pressure pulses. Other systems heat metal platforms to as high as 40°C to take measurements, causing undo thermo stress.



## **Warming Chamber**

The warming chamber is an independent environment that you control through the touch screen interface. Heating plates and room temperature are not a factor. Warm air is delivered to the housing by a small fan which generates a calming "white noise" resulting in consistent and accurate readings.

#### **Software**

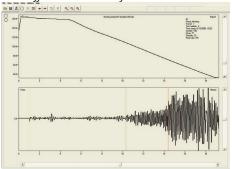
When testing multiple animals, the system is supplied with the proprietary blood pressure software which allows for complete control of all functions and parameters from the software. All data is shown, displayed and saved for later viewing and export.



Animal restraints come in multiple sizes.



#### Tail cuffs are also sized for the animal.



MRBP software can be used for complete control of all functions and parameters.

## **SPECIFICATIONS**

Power	110/220V, switchable
Outputs	Analog and digital
Weight	8 lbs.
Dimensions	16x5x7″

# World Precision Instruments, Inc.

**USA:** International Trade Center, 175 Sarasota Center Boulevard, Sarasota FL 34240-9258 USA **Tel:** 941-371-1003 • **Fax:** 941-377-5428 • **E-mail:** info@wpiinc.com • **Internet:** http://www.wpiinc.com