

Blood Pressure Recorder (non-invasive)

Cat. No. 58500 for Rats

Cat. No. 58600 for Mice

Cat. No. 58550 for Rats & Mice

General

The BP RECORDER 58500 combines three main systems

- pressure generation-pressure monitoring system
- a pulse amplifier and
- a thermal-array analog & digital recording unit

with two auxiliary systems

- pulse rate measuring and recording
- microprocessor controlled functions to self diagnosis, calibration, signal filtering, signal storage.

Instrument Description

Pressure is transmitted to the tail cuff; as soon the cuff pressure exceeds the diastolic pressure and starts to narrow the tail artery, the amplitude of the recorder pulse wave gradually decreases until the artery is completely constricted (ischemic), the graph becoming a straight line.

This point indicates the maximum internal pressure of the artery (**systolic pressure**) on the paper grid, on which the **actual pressure** of the system is **digitally printed in 10 mm Hg steps**.

At the end of the recording a second pressure measurement can be started, with decreasing pressure. The systolic pressure is indicated, this time, by the return of the pulse tracing.

The animal **pulse rate** can be assessed in real time by a pulse rate counter which picks the signal from the pulse transducer.



INDIRECT MEASURING & RECORDING OF THE
SYSTOLIC AND DIASTOLIC PRESSURE
IN UNANAESTHETIZED RATS & MICE

Main Features

- graphic printer
- graphic display
- analog output to digital recorders
- pulse transducers of superior performances
- analogue & digital recording of all experiment phases
- reliable pressure generator, providing smooth, stepless pressure build-up

Animal Restrainers

A convenient animal restrainer is provided with the standard package. Our models are particularly suitable, being purposefully designed for this task, as they feature:-

- a conical "muzzle" to confine the animal head
- availability in 4 different diameters for rat and one for mouse, to fit various animal sizes
- telescope-adjustable length
- a quick fit/release back lid with an ample U-shaped tail slot
- convenient ventilation slots and selection of heat conductive materials, to guarantee body heat dissipation.

Optional Rat Heater / Scanner

The **58000-845 Heating Box for Rats** is a compact temperature controlled "cupboard", inside dimension 57(w)x47(d)x20(h) cm, to lodge and prewarm 5 rats, each in its individual holder; **58000-840**, designed for mice, has the same dimensions, but it accommodates 6 mouse holders.



The **58000-850 Rat Scanner** is also available, combining the pre-warming features, with an electrical/pneumatical switch which enables connection of up to 5 rodents, tail cuff and pulse pick-up positioned on their tail, to scan their blood pressure in sequence.

Both Rat Scanner and Heating Boxes come complete with holders of selectable diameter.

Ordering Information

- 58500** BP RECORDER, with accessories for **RAT**: 8mm pulse pick-up, 13mm cuff, 50mm holder
- 58600** BP RECORDER, with accessories for **MOUSE**: 3mm pulse pick-up, 6mm cuff, 30mm holder
- 58550** BP RECORDER, with accessories for **RAT & MOUSE**

Each BP Recorder includes as standard: dedicated software 52050-08, serial cable & USB adaptor, paper roll.

Available Pulse Pick-Ups

- 58000-503** Pulse Pick-up for Mouse, diam. 3 mm
- 58000-504** Pulse Pick-up for Mouse, diam. 4 mm
- 58000-505** Pulse Pick-up for Rat, diam. 5 mm
- 58000-506** Pulse Pick-up for Rat, diam. 6 mm

- 58000-507** Pulse Pick-up for Rat, diam. 7 mm
- 58000-508** Pulse Pick-up for Rat, diam. 8 mm
- 58000-509** Pulse Pick-up for Rat, diam. 9 mm

Available Tail Cuffs

- 58000-606** Tail Cuff for Mouse, diam. 6 mm
- 58000-609** Tail Cuff for Rat, diam. 9 mm
- 58000-611** Tail Cuff for Rat, diam. 11 mm
- 58000-613** Tail Cuff for Rat, diam. 13 mm

Available Holders

- 58000-343** Mouse Holder, 30 mm I.D.
- 58000-344** Rat Holder, 40 mm I.D.
- 58000-345** Rat Holder, 50 mm I.D.
- 58000-346** Rat Holder, 60 mm I.D.
- 58000-348** Rat Holder, 80 mm I.D.

Optional

- 58000-840** Mouse Heater, compl. with 6 mouse holders
- 58000-845** Rat Heater, complete with 5 rat holders of selectable I.D.*
- 58000-850** Rat Scanner, complete with 5 rat holders of selectable I.D.* °

* if diameter is not specified, the 50mm size will be supplied

° pressure cuffs & pulse pick-ups are not included, and should be ordered separately

Specifications

Pressure Range	50 to 290 mm Hg
Power Requirements	115 or 230 V, 50/60 Hz, 25 W
Weight (net)	Kg 10.6
Shipping Weight	Kg 15.0 approx.
Dimensions	35x35x17(h)cm
Packing dimensions	80x60x44cm

Bibliography

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