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

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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

Ugo Basile: more than 10,000 citations

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

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