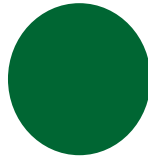


EXPERIMETRIA LTD.

Brochure



**CONSCIOUS RABBIT
ELECTRO-
PHYSIOLOGICAL and
HAEMODINAMICAL
MEASURING SYSTEM**



www.experimetria.com ●●●

The model developed by Experimetria Ltd. together with the Pharmacology Faculty (Professor. Dr. Szilvássy Zoltán's working team), University of Debrecen is feasible to carry out specified haemodynamical and electro-physiological studies, economically and quickly, in conscious circumstances.

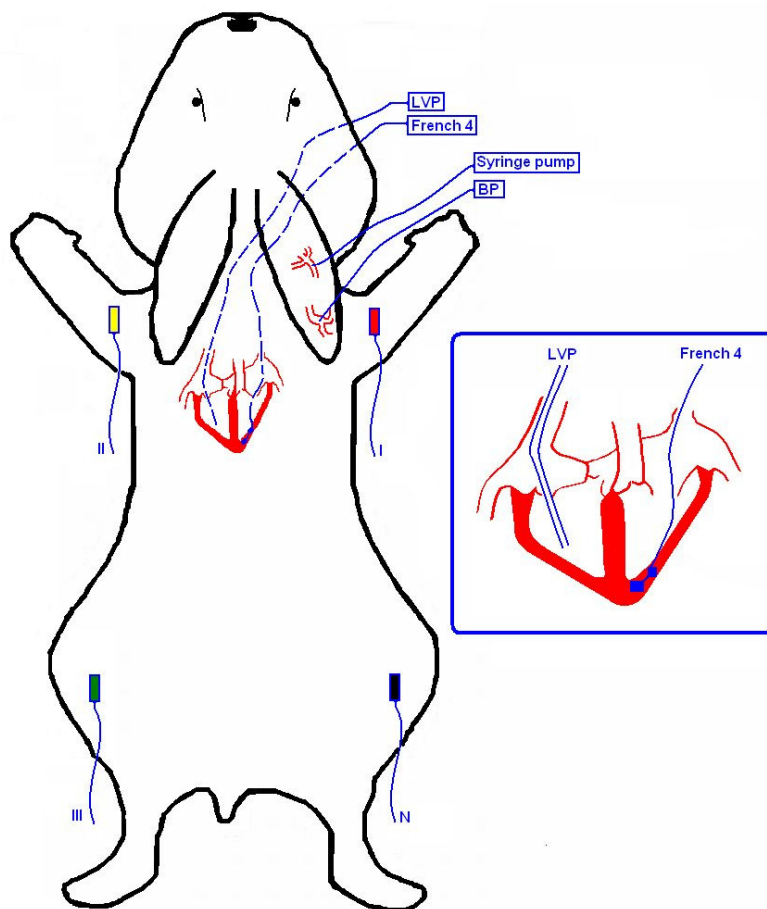
The physiological and pharmacological basic mechanisms in various fields of cardiovascular system can be well studied with the measuring system, as well as the haemodynamical and electro-physiological phenomenon of effects of dosage interventions. (e.g. Q – T, intracavitary ST segment alteration, VOP, VERP, LVP, LVEDP, BP etc.). Multi-functional study can be carried out, depending on the setting of the sensors, in the set up of the model in conscious state besides continuous dosage. The setting can be seen in the diagram below.



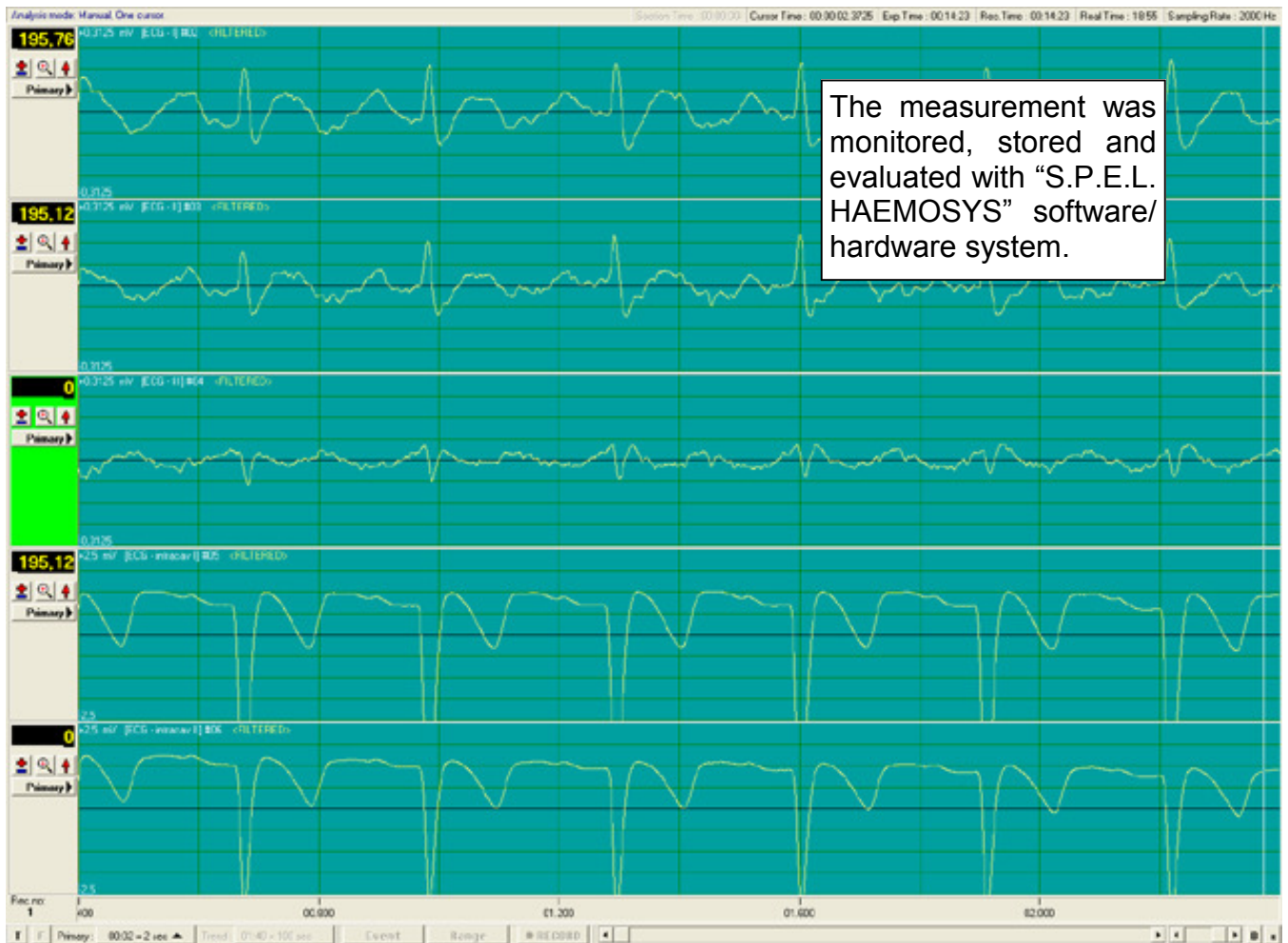
The setting can be seen in the diagram below.

We measure the systemic blood pressure by the cannula implanted into the artery of the ear and with BPR-02 sensor and CRS-HG amplifier.

- We give in the substance by the cannula implanted into the ear's vein with a syringe pump.
- LVP is measured by the cannula implanted in the left ventricle. (With BPR-02 and CRS-HG).
- We can carry out stimulation by the cannula (French 4) driven into the right ventricle with the CRS-ST square wave stimulator, or we can measure the mono-phase potentials with the help of the same electrode through CRS-EXT amplifier.
- We can measure the standard I-II-III ECG outlets with the help of the electrodes implanted close to the limbs.



The diagram, which can be seen above, shows the maximum build up of the measuring system. Naturally, the build up of the system is always determined by the task, therefore the sensors needed should be employed accordingly.



The measurement was monitored, stored and evaluated with "S.P.E.L. HAEMOSYS" software/hardware system.

References:

Szilvássy Z, Jakab I, Bor P, Koltai M, Droy L, Lefaix MT, Esanu A, Tarrade T, Braquet P, Lonovics J: Anti-ischemic effect of cicletanine in conscious rabbits: a possible relation to changes of cardiac cyclic nucleotide content. *Coronary Art. Dis.* **4** 443-452, 1993

Szilvássy Z, Ferdinandy P, Bor P, Jakab I, Lonovics J, Koltai M: Ventricular overdrive pacing-induced anti-ischemic effect: A conscious rabbit model of preconditioning. *Am. J. Physiol.* **266** (Heart Circ. Physiol, 35): H2033-H2041, 1994

Szilvassy Z, Ferdinandy P, Szilvassy J, Nagy I, Karcsu S, Lonovics J, Dux L, Koltai M: Loss of preconditioning in atherosclerotic rabbits: The role of hypercholesterolaemia. *J. Mol. Cell. Cardiol.* **27** 2559-2569, 1995

Szilvássy Z, Ferdinandy P, Nagy I, Jakab I, Koltai M. The effect of continuous versus intermittent treatment with transdermal nitroglycerin on pacing-induced preconditioning in conscious rabbits. *Br. J. Pharmacol.* **121** 491-496, 1997

Szilvassy Z, Ferdinandy P, Cluff C, Elliott GT. Effect of monophosphoryl lipid A on pacing-induced myocardial ischaemia in conscious rabbits. *J. Cardiovasc. Pharmacol.* **32** 206-212, 1998