



# Hot / Cold Plate

Cat. No. 35100

## General

This new instrument can be used as:

- A **conventional HOT PLATE**, to carry out a rapid precise screening of narcotic type analgesic drugs according to the well known Hot Plate Test devised by N.B. Eddy and D. Leinbach.
- As a **COLD PLATE**.  
The **Cold Plate Test** is useful in studying cold receptors and cold allodynia, a phenomenon very frequently observed in chronic pain in humans.

The **two operating modes** allow for testing at fixed temperature or at increasing/decreasing temperature. The latter experiment scheme is obtained by simply setting on the keypad the starting temperature and the final temperature.



**For Rats**

**For Mice**

**IT CAN BE USED AS:**

- Hot Plate
- Cold Plate

## Main Features

- Operating Temperature: 2°C to 66°C pre-settable by function keys
- Two operating modes: fixed or ramping temperature, for dynamic experiments
- PC Interface: USB and serial
- Computer compatibility: direct connection to a PC, via the dedicated software included as standard
- Data Portability: via the Memory-Key, included as a standard
- Print-out: by optional thermal mini-printer

**Ugo Basile: more than 10,000 citations**

## Instrument Description

The Instrument features:

- a cabinet of original design, incorporating the Plate proper and a Command/Display Module
- a convenient Plexiglas restrainer (suitable to restrain either mice or rats).

The multifunction liquid-crystal graphic-display monitors the plate temperature in 0.1°C steps and shows the reaction time in 0.1 s increments on the graphic display.

The graphic display also presents all available commands: the operator sets the experiment configuration via the command keyboard located on the right of the display.

The plate temperature can be set by the operator in the range 2-66°C. The extremes of this ample range can be reached, provided the room temperature remains in the interval 18-23°C.

- an "auxiliary" conventional Hot Plate, can be supplied as optional for connection to the 35100.



In fact both the control and the power supply are flexible and powerful enough to enable the researcher to connect an "auxiliary" conventional Hot Plate with the same operational features of a complete Hot Plate.

## Data Acquisition

The 35100 is a microprocessor controlled unit. The experimental data, stored in its internal memory can be directly exported to the PC USB or serial ports. Communication is managed by the dedicated CUB Data

Acquisition Software Package, **Cat. 52050-11**, included as standard.

The CUB Windows®-based Software Package enables the user to route to the PC the data originated by UB instruments and store them into individual files, ready to be easily managed by most statistical analysis packages available on the market.

The 35100 is provided with a **memory key**, to record all the experimental data of one or more sessions and to program the experiment layouts from a remote PC.

## Ordering Information

**35100 HOT / COLD PLATE**, standard package, including:-

<b>35100-001</b>	Cabinet
<b>35100-286</b>	Perspex Animal Restrainer (for Mice and Rats)
<b>35100-302</b>	Instruction Manual
<b>37215-303</b>	Pedal Switch/Cable/Connector Assembly
<b>M-LM 345</b>	Dust Cover for the Plate
<b>E-AU 041</b>	Memory Key
<b>E-WP 008</b>	Mains Cable
<b>52050-11</b>	CUB Data Acquisition Software Package, complete with USB Connection Cable & USB-to-Serial Converter

Set of 2 fuses

### Optional

<b>35100-002</b>	Auxiliary Hot Plate
<b>57145</b>	Thermal Mini Printer including 20-pin connection cable

### Physical

Universal input	85-264 VAC, 50-60Hz
Dimensions	cm 25 (w) x 37 (d) x 47 (h) with rat restrainer
Weight	6,2 Kg
Shipping Weight	11,5 Kg approx.
Packing Dimensions	80 x 60 x 44 cm

## Bibliography

- M. Sakurai *et alia*: "Oxaliplatin-induced neuropathy in the rat: involvement of oxalate in cold hyperalgesia but not mechanical allodynia". PAIN 147 (2009) 165-174
- L.Yu *et alia*: "Effects of calcitonin gene-related peptide-(8-37) on withdrawal responses in rats with inflammation" EJP 347 (1998) 275-282
- D. Piomelli *et alia*: "Anandamide suppresses pain initiation through a peripheral endocannabinoid mechanism". Nature NSC (2010)