

# Tail Flick

## Accurate. Easy. Reliable.

The Tail Flick is the classic method (D'Amour and Smith) for thermal analgesia detection, especially when reflex-like responses are the subject of investigation (rather than supraspinal responses).

The NEW Ugo Basile Tail Flick consists of an I.R. source of adjustable intensity focused on the rat tail, that automatically measures the nociceptive threshold to thermal stimuli (latency time for the tail to flick). All is controlled and stored in the NEW touch screen interface.

The rodent is held by the operator or by using a holder (mouse) in such a way that its tail receives the I.R. energy and triggers the automatic detector, showing the corresponding IR intensity and latency time on the touch screen. Data is stored internally and exported into USB stick.

The operator starts the stimulus and the timer starts counting. When the rat feels pain and flicks its tail, a sensor detects it, stops the second counter and switches off the bulb. The reaction time of the animal is thus determined and automatically recorded with high accuracy and no human variability.



- **NEW: bright touch screen for great usability and result review; intuitive user interface.**
- **NEW: automatic tail flick detection or foot pedal driven.**
- **USB data export into Excel.**
- **For mice and rats. Mice holders available**



## Features and Benefits

- **The Ugo Basile Tail Flick is the most used and validated worldwide**

More than 3,000 citations and decades of experience guarantee performance, reliability and speed of execution for your experiments.

- **The touchscreen**

Together with a very efficient design of the menu structure, ensure intuitivity, full functionalities for settings, test performance and result review, from the screen or by data export into Excel.

- **The automatic detection of tail flick latency**

is now accompanied by the option for the scientist to score the animal behavior manually, if the specific test or animal model requires to override the automatic detection provided by the device by default.

As shown in the screenshot below, the IR intensity (i.e. the amount of energy which will be delivered to the animal tail) is set in a 1-100 scale (in 1 digit steps); a security cut-off time is also set (not shown here) and the detection mode can be manual (in this case the automatic detection won't work) or in "auto".

In **Automatic mode** the system will detect the tail flick latency (0.1s resolution) without any intervention of the experimenter, but, if during the test she presses the foot pedal, this will override the automatic mode and the latency time will be the one dictated by the foot-pedal press.

For those who desire to periodically calibrate the device energy source and translate the 1-100 energy scale into

absolute units, the **37300 Radiometer (energy meter)** is available; it works for for both the Tail Flick and the Plantar Test Device.

Because mice may tend to lift their tail during the test, also the optional **mouse holders**, specifically designed for the



Tail Flick are available. They help in correct positioning of the tail over the emitter.

**Result generation, internal storage and data export:** the accuracy, efficiency, flexibility and integration of the Ugo Basile Tail Flick are the result of the extensive testing on the touch screen user interface, of the electronic redesign (now with an internal hard disk) and of the **"one-touch" data export**.

Data are stored and can be retrieved from the unit itself and also by simply plugging a USB pen drive in the USB port, to be available in your office PC in your office, seamlessly.

## Specifications

Command input & read out	4.3" touch-screen (resistive)
Data export	.csv format, from USB key (provided)
I.R. Intensity	Adjustable from 1 to 100 (in one digit steps)
Latency time	Displayed on the graphic display, in 0.1s steps
Cut-off function	From 5 to 30 sec
Designed for	Mice and Rats.
Start experiment	By Start button, pedal switch or TTL input
Stop experiment	By Stop button, pedal switch, cut-off or TTL input
TTL I/O	Input and output TTL signal
Sound Level	< 54dB
Measurement mode	Manual or Automatic
Power Requirements	Universal input 100-240 VAC, 50-60Hz, 50W
Required space on table (all parts)	135cm(w) x 40cm(d) x 50cm(h)
Dimensions with out extension table mounted	27cm(w) x 38.5cm(d) x 13cm(h)
Dimensions with extension table mounted	37,5cm(w) x 38.5cm(d) x 13cm(h)
Packaging dimension:	46cm(w) x 35cm(d) x 28cm(h)
Weight	11 Kg (shipping weight 14 kg)



USB key to export csv data to PC



USB key to export csv data to PC

