

Tracksys Tower Filming System

What is it for?

Provides a robust, reliable view of large numbers of small animals such as 5-day old Zebrafish larvae and *Drosophila* in chambers. When used in conjunction with EthoVision, up to 100 animals can be tracked in their own arenas with no additional set-up time when a new batch of animals is introduced.

What problems does it solve?

- Shadowing on the sides of the deep wells that are off centre,
- Unstable camera mounts causing the image to move,
- The requirement for good tracking in both the light and dark, and
- Reliable positioning of the plates so the arena definition never has to be re-defined.

How does it work?

A dedicated visible/infra-red light box with a diffuser provides constant IR illumination (Fig. 1). Visible light can be provided when required, either as part of the circadian rhythm, or as a stimulus under the control of EthoVision. A holder on the top surface of the light box ensures that plates are always in exactly the same position, e.g. a 96-well plate containing zebrafish larvae (Fig. 2). The tower is a rigid stand with an IR-sensitive low-noise SONY camera mounted at the top (Fig 3). The structure keeps the camera in a fixed position so that the view of the well-plate remains constant during tracking, even if the unit is mounted on a floor that distorts as people move around it. The tower is enclosed with blackout bellows to eliminate light from external sources (Fig. 4).

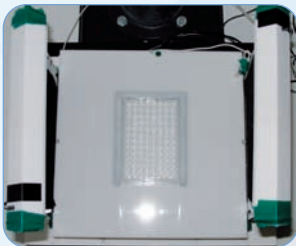


Figure 1

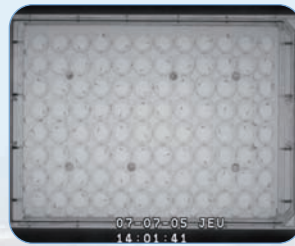


Figure 2

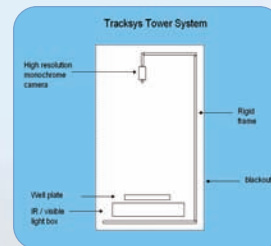


Figure 3



Figure 4

The top plate is suitable for all standard well plates (6, 12, 24, 48 and 96). Should your experiments require non-standard apparatus we are very happy to modify the system.

Related products

EthoVision Video tracking system for up to 100 animals, each in their own arena.

Technical Specifications

Tower structure – rigid steel support with flexible bellows. Dimensions 590mm x 400mm x 1900mm high Lightbox.

IR and visible light box with locator for tracking arena. Dimensions 300mm x 270mm x 110mm high.

Camera & Lenses.

Camera: Sony high resolution IR sensitive imaging with 50mm lens and IR pass-filter. PAL and NTSC available.

Available direct from Tracksys in UK & Ireland, and from Noldus worldwide (www.noldus.com)

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