

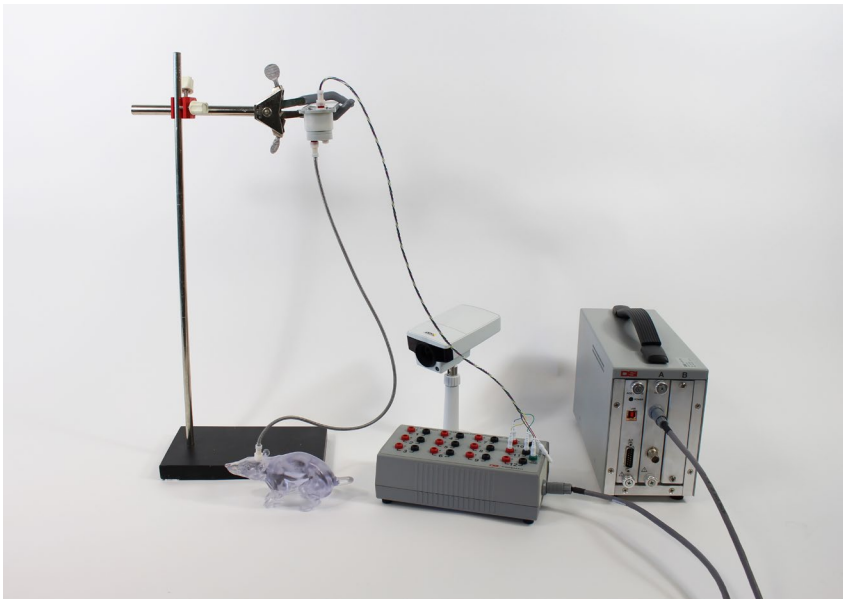
Hardwired Video–EEG

DSI's hardwired (tethered) solutions provide a minimally invasive method to offer continuous measurement (EEG, EMG, EOG, etc.) during neuroscience studies with small animals. Tethered solutions allow monitoring of up to 12 EEG/EMG channels per animal.

Commutator (electrical swivel or slip ring) systems offered by Plastics One are easily connected to DSI's robust hardware platform. Multi-channel commutator configurations are available; allowing flexibility as research needs change.

Typical commutator solutions from Plastics One include:

- Screw electrodes
- Head stage pedestals
- Tether/spring
- Commutator



Touch proof connectors allow signals to come from the commutator to DSI's Ponemah[™] software using:

- 12 Channel Isolated Biopotential Pod (BIO12POD)
- Digital Communication Module (DCOM)
- 2, 6, or 13 slot acquisition interface unit (ACQ7700)

The BIO12POD offers an input range (40uV to 40mV, full scale) and input bandwidth (0.05 Hz to 1

When integrating a network camera and Noldus Media Recorder, scientists now have an easy method for synchronizing physiologic data with video data and the possibility of performing behavioral analysis offline with Noldus Behavioral Software (EthoVision).

DSI's Video-EEG solution caters to a variety of neurological applications and combination studies including (but not limited to) sleep, Parkinson, Alzheimer's, and traumatic brain injury. Add plethysmography chambers to the setup and polysomnography studies can be conducted.

Suggested References

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