Resource Summary Report

Generated by PRECISE-TBI on Aug 1, 2026

Active Commutator

RRID:SCR_027098
Type: Tool

Proper Citation

Active Commutator (RRID:SCR_027098)

Resource Information

URL: https://github.com/ThomasAkam/active_commutator

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Description: Open source active commutator for Open Ephys / Intan electrophysiology systems. Motorized device used in neuroscience research, particularly in studies involving freely moving animals, to manage wires or fibers connecting headstage or other device to external equipment. Addresses common issue of tether tangling during experiments with freely moving subjects. Relies on Hall-Effect sensor detecting rotation of cable, this information is continuously fed to Adafruit microcontroller that operates servo motor to counter-rotate cable as needed, preventing twisting and ensuring clear, uninterrupted data collection. System can also be paused, restarted, and its neutral position recalibrated with simple button presses, allowing for flexible operation.

Resource Type: source code, software resource, instrument resource

Keywords: OpenBehavior, device, commutator, neuroscience, electrophysiology system, freely moving subjects, flexible operation,

Availability: Free, Available for download, Freely available

Resource Name: Active Commutator

Resource ID: SCR_027098

Record Creation Time: 20250627T054457+0000

Record Last Update: 20260801T042942+0000

Ratings and Alerts

No rating or validation information has been found for Active Commutator.

No alerts have been found for Active Commutator.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.