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Advanced European Infrastructures for Detectors at Accelerators

Scientific/Technical Note

Checklists for using and maintaining EUDET beam telescopes

Dreyling-Eschweiler, Jan (DESY) *et al*

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TECHNICAL NOTE

CHECKLISTS FOR USING AND MAINTAINING EUDET-TYPE BEAM TELESCOPES

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Authors:	Jan Dreyling-Eschweiler and Hendrik Jansen telescope-coor@desy.de

Contents:

Using or maintaining an EUDET-type beam telescope requires some knowledge and expertise. Thus, this document contains the most important steps to operate and to maintain these kind of test beam tools at CERN, DESY and SLAC.

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CHECKLISTS

AUTO TRIGGER TEST (FUNCTIONALITY TEST WITHOUT BEAM)

- power on Mimosa26 sensors → total current 2.1 A
- load a threshold configuration file (JTAG) → total current 3.0 A
- start the sensors → total current 3.6 A
- Open the Mimosa DAQ
- Start EUDAQ and configure with “auto trigger” configuration file
- Proper performance, if the event rate is

Checklist for switching off the telescope

Standard (after test beam):

- Stopping data taking: "Stop" EUDAQ and "Terminate"
- Sensors
  - Stop sensors in the software ("Reset") ☐ total current 2.1 A
  - Switch off power
  - Switch off cooling cycle
- TLU incl. power supply for trigger devices: Unplug the power supply

For longer shutdowns (> 2 weeks):

- PI Stages
  - Switch off software
  - Switch off power of stages
  - Switch off power of controllers
- Computers: Shutdown
- Move the telescope out of the beam.

CONTACT

Telescope logbook: https://tblogs.desy.de/
User manual for EUDET-type telescopes: https://telescopes.desy.de/User_manual
Contact: telescope-coor@desy.de