

Interlock system for the injector for RAON

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RAON (Rare Isotope Accelerator complex for On-line experiments) not only completed beam commissioning but also successfully provided its first user service for its low-energy section using an argon beam in 2024. Anticipating issues such as malfunctions in the vacuum gauge and pump during accelerator operation, both the alarm system for operators and the interlock system for equipment protection against unforeseen events were developed. This paper presents the logic designs and implementation details of the interlock system for the RAON injector. The interlock logic, based on EPICS sequencer functionality, is designed to collect signals related to equipment malfunctions or status anomalies and respond with predetermined protective sequences swiftly and efficiently. During the recent user service period, we confirmed the successful activation of the interlock system in response to a vacuum issue, marking its first operation under such conditions. We are currently refining the interlock system to address various scenarios in greater detail.

Paper submission Plan

Best Presentation

Contribution track

ICABU WG1. Accelerator Systems

Primary author: AHN, Yujung (Institute for Basic Science)

Co-author: KIM, Hyung Jin (Institute for Basic Science)

Presenter: AHN, Yujung (Institute for Basic Science)

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