

FFD electronics testbench

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The Fast Forward Detector (FFD) is an important part of the Multi-Purpose Detector (MPD) facility for study of **Au + Au** collisions with beams at the NICA collider.

FFD consists of two modular arrays with 20 modules per sub-detector. Each module contains quartz radiators, an MCP-PMT, a high voltage divider and a front-end electronic board (FEE).

The FFD modules of each array are connected to the Arm Processor Unit (APU) electronics. Signal Processing Module (SPM) is a part of APU and it is used for FFD modules signal processing.

Each FFD modules must be tested before assembling the system and this procedure includes checking the channel gain, the pulse shape and width, the FEE working conditions e.t.c.

The test-bench includes a FEE test card and 2 types of pulse generator. The FEE testing card and one signal generator is used for checking the parameters of the front-end board. The second one is used for SPM testing with special software. The generator control is made with custom GUI on PC.

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