

Thesis Title	A Construction of Digital Exposure Timer Meter for Diagnostic X-ray Machine
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Abstract

Digital Exposure Timer Meter is constructed for measuring exposure time of diagnostic X-ray machines. A semiconductor detector is used for detecting the radiation waveform caused by X-rays. The detected radiation waveform is amplified and passed through the electronic circuits, and is finally displayed in number of pulses or exposure time. From the performance test carried, the instrument is capable to measure X-ray exposure time from 0 – 65,535 pulses in pulses mode with ± 1 pulse accuracy and from 0 – 65,535 ms in time mode with ± 1 ms accuracy. This instrument can be interfaced to storage oscilloscope for the X-ray waveform analysis.