

瞬变电磁探测发射电流波形记录单元设计

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摘要 为削弱一次场的影响, 减小探测盲区, 需要记录发射电流波形。本文采用电流取样、前置放大及滤波、信号采集等技术, 记录发射电流关断波形。实际测试结果表明: 设计的电流记录单元能够完整、平滑地记录发射电流波形, 记录的波形与示波器观测到的发射电流波形一致, 电流采集精度高。

关键词 [测绘仪器](#), [瞬变电磁](#), [发射机](#), [关断时间](#)

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Design of transmit current recorder of transient electromagnetic detection system

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Abstract To weaken the effect of the primary field and reduce the blind zone of exploration, the transmitting waveform needs to record. In this paper a recording unit is designed, which records the transmitting current by current sampling, preamplifying and filtering, and signal sampling. The test results show that the designed recording unit can fully and smoothly memorize the transmitting current waveform, which has the similar shape to the display waveform on the oscillograph with higher sampling precision.

Key words [instrument of surveying and mapping](#) [transient electromagnetic](#) [transmitter](#) [turn off time](#)

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