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and results from a feedback digital Infrasound detector system

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Since the signing of Comprehensive Nuclear test-ban Treaty CTBT in 1996 and the establishment of IMS International Monitoring Systems for the verification of nuclear explosions significant improvements has been achieved in monitoring systems. . The improvements in seismic detection systems and the technology has substantially surpassed the development and the sophistication of infrasound monitoring systems. A feedback infrasound system based on a new topology and concept is described. Design details and results will be presented. The described feedback Infrasound system eliminates all the shortcomings of existing infrasound detection technology. The designed low noise digital Infrasound (micro-barometer) system provides an improved method of calibration. The frequency response and gain of the feedback detector is dependent only on the electrical parameters of the feedback- loop providing a stable and highly accurate detector. It will be shown that the digital Infrasound detector response to seismic signals is virtually eliminated. The system provides three independent outputs, these being: output proportional to pressure, derivative of pressure and second derivative of pressure.

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