Digital instruments come to be used in Desk Top Music (DTM), live performance, etc. These performances are recorded as digital contents, and circulated actively through network and electronic media. Digital Water mark technology paid much attention to solve the problem of illegal distribution & duplication when the digital contents are spread over electronic media. In this paper, we focus on a sound synthesized process in digital instruments, and propose a audio watermarking based on wavetable switching method. Certain watermarks are embedded in wavetables that are included in our digital instruments, and the insertion of secret messages is actualized with wavetable switching. Additionally, embedded watermarks can be extracted from the acoustic signal. The proposed method is able to achieve a real-time watermark, i.e., both musical performance and the insertion of watermark can be actualized.
Reference


Index Terms

Computer Science Multimedia Security

Key words

Audio Watermark Digital Instrument
Wavetable switching

MIDI