Development of Seismograph Equipped with Improved Algorithms for the Earthquake Early Warning Naoyasu IWATA Shunroku YAMAMOTO Recently the upgraded seismograph for earthquake disaster prevention, contributing to the safety improvement during earthquakes, has been expected. As actions for the functional advancement of the seismograph, the algorithms for the seismic parameters estimation and the noise discrimination by a single station were improved. In this report, we evaluated the estimating accuracy of the seismic parameters derived from the improved algorithms using waveforms recorded in the past earthquakes. Then, we developed a prototype seismograph equipped with the upgraded algorithms to verify the performance under the practical condition. As a result of field examinations, adequate processing was confirmed.