

Abstract

An acceleration signal d_a , which is a digital form of an acceleration signal a outputted from an acceleration sensor 11, is integrated by an integrating section 16 to obtain a speed signal b . Further, the speed signal b is integrated by the integrating section 16 to obtain a distance signal c indicating a distance traveled. In a computing section 13, FFT computation is performed to obtain a vibration frequency having the largest vibration intensity. If the vibration frequency having the largest vibration intensity is an idling frequency stored in an idling frequency storage section 14, a speed reset signal R is outputted from a determining section 15. Upon outputting of the speed reset signal R , the integrating section 16 forcibly brings the value of the speed signal b , which is to be integrated, to zero, thereby preventing an increase in the cumulative error of the speed signal c .