

ABSTRACT

TRAVEL DISTANCE ESTIMATION DEVICE

A travel distance estimation device is provided. The travel distance estimation device includes: an estimated velocity determination unit (128) that successively estimates an estimated velocity V_e^t of a movable object based on an acceleration integrated value and a velocity initial value V^0 ; a travel distance calculation unit (141) that successively calculates an estimated travel distance L_e^t of the movable object based on the estimated velocity V_e^t ; and a past velocity correction unit (142) that determines corrected past velocities by correcting pre-correction past estimated velocities so that the corrected past velocities are continuous with the velocity initial value determined this time. The pre-corrected past estimated velocities are the estimated velocities that were successively determined during a time period from when the velocity initial value was determined the previous time until the velocity initial value is determined by the initial setting value determination unit this time. The travel distance estimation device further includes a travel distance correction unit (143) that, upon determining the corrected past velocities, recalculates based on the corrected past velocities and the time period an estimated travel distance during the time period from when the velocity initial value was determined the previous time until the velocity initial value is determined this time.

FIG. 3