CLAIMS

1. A passenger conveyor system including a passenger conveyor and a moving body,

wherein the passenger conveyor includes:

a pair of left and right balustrades along which handrail belts respectively travel;

steps that move in a front-rear direction between one landing and the other landing between the pair of left and right balustrades;

a pair of left and right lamps respectively provided along a front-rear direction on upper portions of the pair of left and right balustrades; and

a main control section that moves the steps;

and the moving body includes:

a moving body main unit that moves while riding on a step;

a left sensor and a right sensor provided on the moving body main unit and configured to respectively detect illuminance from the pair of left and right lamps; and

a moving body control section;

wherein the left sensor and the right sensor are provided at heights corresponding to heights of the pair of left and right lamps on the pair of left and right balustrades;

wherein the moving body control section:

defines a start point as a time when the moving body rides on the step at one landing and an end point as a time when the moving body gets off the step at the other landing;

during movement of the moving body from the start point to the end point, generates left-side illumination information at predetermined time intervals by determining that the left-side lamp is in a bright illumination state when illuminance detected by the left sensor is higher than a reference value and is in a dark illumination state when the illuminance is lower than the reference value, and generates right-side illumination information at predetermined time intervals by determining that the right-side lamp is in a bright illumination state when illuminance detected by the right sensor is higher than the reference value and is in a dark illumination state when the illuminance is lower than the reference value;

generates left-side continuous illumination information by arranging the left-side illumination information at the predetermined time intervals from the start point to the end point in chronological order, and generates right-side continuous illumination information by arranging the right-side illumination information at the predetermined time intervals from the start point to the end point in chronological order; and

the main control section determines that, when the n-th left-side illumination information arranged in chronological order at the predetermined time intervals in the left-side continuous illumination information indicates a dark illumination state, the n-th left-side lamp from the start point is in the dark illumination state, and when the n-th right-side illumination information arranged in chronological order at the predetermined time intervals in the right-side continuous illumination information indicates a dark illumination state, the n-th right-side lamp from the start point is in the dark illumination state.

2. The passenger conveyor system according to claim 1,

wherein the moving body control section includes a moving body communication section configured to transmit the stored continuous illumination information to the main control section.

3. The passenger conveyor system according to claim 1,

wherein the main control section notifies a monitoring device of a maintenance center located externally when the continuous illumination information includes a dark illumination state.

4. The passenger conveyor system according to claim 1,

wherein the lamps are LEDs or straight-tube fluorescent lamps.

5. The passenger conveyor system according to claim 1, wherein the sensors are capable of detecting chromaticity together with illuminance, and the illumination information includes chromaticity.

6. A moving body comprising:

a moving body main unit that moves while riding on a step of a passenger conveyor;

a left sensor and a right sensor provided on the moving body main unit and configured to respectively detect illuminance from a pair of left and right lamps provided along a front-rear direction on upper portions of a pair of left and right balustrades of the passenger conveyor; and

a moving body control section;

wherein the left sensor and the right sensor are provided at heights corresponding to heights of the pair of left and right lamps on the pair of left and right balustrades;

wherein the moving body control section:

defines a start point as a time when the moving body rides on the step at one landing and an end point as a time when the moving body gets off the step at the other landing;

during movement of the moving body from the start point to the end point, generates left-side illumination information and right-side illumination information at predetermined time intervals based on whether illuminance detected by the left sensor and the right sensor is higher or lower than a reference value; and

generates left-side continuous illumination information and right-side continuous illumination information by arranging the illumination information at the predetermined time intervals from the start point to the end point in chronological order.