Claims

[Claim 1]

A head-position sway measuring device that measures a head-position sway value that is a value indicating a variation amount of sway of a head position of a subject, the device comprising:

an opening/closing instruction unit that instructs the subject to open or close his or her eyes;

a displacement measurement unit that measures a displacement of the head position of the subject; and

a sway recognition unit that recognizes the head-position sway value based on the measured displacement of the head position, wherein

the displacement measurement unit measures one of a first measurement value that is a measurement value of the displacement of the head position in a state where the opening/closing instruction unit instructs to open eyes and a second measurement value that is a measurement value of the displacement of the head position in a state where the opening/closing instruction unit instructs to close eyes, and then measures another of the first measurement value and the second measurement value successively or after a lapse of a predetermined length of time, and

the sway recognition unit recognizes the head-position sway value based on the first measurement value and the second measurement value related to the first measurement value,

wherein the opening/closing instruction unit includes an image display unit that displays a first instruction image that instructs the subject to open his or her eyes or a second instruction image that instructs the subject to close his or her eyes, and the first instruction image includes a graphic image that is the subject’s gaze target.

[Claim 2]

The head-position sway measuring device according to Claim 1, wherein

the first instruction image includes the graphic image and a background image that serves as a background of the graphic image, and

a boundary part of the graphic image adjacent to the background image has a gradation of at least one of brightness or saturation changing gradually from a periphery toward a center of the graphic image.

[Claim 3]

The head-position sway measuring device according to Claim 2, wherein

the graphic image is a circular or polygonal image, and

the value of the at least one of brightness or saturation of the graphic image increases from the periphery toward the center and, in a central area, decreases toward the center.

[Claim 4]

A biological information acquisition system comprising:

at least one of a hearing acuity measuring device that measures a hearing acuity threshold of the subject, a nystagmus measuring device that measures nystagmus data on the subject, or a medical interview result recognition unit that recognizes a result of a medical interview about dizziness with the subject;

the head-position sway measuring device according to any one of Claims 1 to 3; and

a data storage unit that stores at least one of the hearing acuity threshold, the nystagmus data, or the medical interview result measured before a lapse of a predetermined length of time from when the head-position sway measuring device measured a head-position sway value, and the head-position sway value in association with the at least one of the hearing acuity threshold, the nystagmus data or the medical interview result.

[Claim 5]

The biological information acquisition system according to Claim 4, wherein the head-position sway measuring device is a portable device.

[Claim 6]

A head-position sway measuring method of measuring a head-position sway value that is a value indicating a variation amount of sway of a head position of a subject, the method comprising steps of:

instructing, by an opening/closing instruction unit that instructs the subject to open or close his or her eyes, the subject to do one of opening and closing eyes and then instructing the subject to do another of opening and closing eyes successively or after a lapse of a predetermined length of time;

measuring, by a displacement measurement unit that measures a displacement of the head position of the subject, a first measurement value that is a measurement value of the displacement of the head position in a state where the opening/closing instruction unit instructs to open eyes and a second measurement value that is a measurement value of the displacement of the head position in a state where the opening/closing instruction unit instructs to close eyes;

recognizing, by a sway recognition unit that recognizes the head-position sway value based on the measured displacement of the head position, the head-position sway value based on the first measurement value and the second measurement value related to the first measurement value; and

using an image display unit that displays a first instruction image that instructs the subject to open his or her eyes, or a second instruction image that instructs the subject to close his or her eyes, the first instruction image including a graphic image that is the subject’s gaze target.