Hardware Calibration of EyeTracker

Abstract

A gaze tracking device (120) is calibrated to a display unit (110) by presenting graphical guide objects (G1, G2, G3) on an active area (110A) thereof, which designate distinctive features (121, 122; 123) reflecting how the device (120) may be positioned (x1, x2) on a first side (110X) of a frame (110F) of the display unit (110). User commands (MC) move the objects (G1, G2, G3) on the display's active area (110A) in a first direction parallel to the first side (110X) of the frame (110F). A position value (Px) designating an actual position for the gaze tracking device (120) on the first side (110X) of the frame (110F) is assigned based on a current position of the graphical guide objects (G1, G2, G3) on the active area (110A). An offset value (X-OFF) is calculated based on the assigned position value (Px) and a known measure of the active area (110A). The offset value represents a distance in the first direction between a well-defined point (123) of the gaze tracking device (120) and a well-defined point of the first side (110X). Width and height measures (X, Y) reflecting a physical extension of the active area (110A) are also determined and stored in response to a user input confirmation command (CC) together with the offset value (X-OFF), so that the values can be used when determining a user's gaze point on the active area (110A).

(Fig. 1)