

ABSTRACT

A REFLECTION-TYPE PULSE DETECTION DEVICE AGAINST
MOTION INTERFERENCE

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Disclosed is a reflection-type pulse rate detection device against motion interference, which relates to the technical field of the pulse rate detection device. The device includes a reflection type pulse rate detection module (1), a circuit driving module (2), a signal conditioning module (3), an ultra-low power wireless transceiver module (4), a
10 microprocessor control module (5), a display module (6) and a remote terminal (7). The reflection-type pulse rate detection module (1), which is connected with the circuit driving module (2), consists of a first LED light tube (101), a second LED light tube (103) and a photoelectric receiving tube (102). The signal conditioning module (3) consists of a
15 detection circuit (301), a filter circuit (302) and a subtraction circuit (303). The detection circuit (301), the filter circuit (302) and the subtraction circuit (303) are connected to the microprocessor control module (5) in turn, which is respectively connected with the LED circuit driving module (2), the ultra-low power wireless transceiver module (4) and the display module (6). The ultra-low power wireless transceiver module (4) is connected with
20 the remote wireless terminal (7). The present invention with the ability of motion interference reduction is low consumption and can interact with the remote terminal. Extracting the pulse rate signal with higher SNR and suppressing common motion interference, it has strong anti-saturation ability.

(FIG. 1)

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