Claims

1. A reflection-type pulse rate detection device against motion interference comprising:

a reflection-type pulse detection module;

a circuit driving module;

a signal conditioning module;

an ultra-low power wireless transceiver module;

a microprocessor control module;

a display module; and

a remote terminal,

wherein the reflection type pulse rate detection module comprises a first LED light tube, a second LED light tube and a photoelectric receiving tube,

and wherein the circuit driving module, the signal conditioning module, the ultra-low power wireless transceiver module and the display module are all connected to the microprocessor control module, and the ultra-low power wireless transceiver module is connected to the remote terminal over a wireless link.

2. The reflection-type pulse rate detection device against motion interference of claim 1, wherein the signal conditioning module comprises a detection circuit, a filter circuit and a subtraction circuit,

wherein the detection circuit, the filter circuit and the subtraction circuit are connected to the microprocessor control module.

3. The reflection-type pulse rate detection device against motion interference of claim 1, wherein the signal conditioning module uses a dual-path detection circuit,

wherein one path of the detecting circuit detects a pulse rate signal with the superimposition of motion noise, while the other path of the detecting circuit detects motion noise.

4. The reflection-type pulse rate detection device against motion interference of claim 1, wherein the first LED luminous tube and the second LED luminous tube emit monochromatic or double color light with different wavelengths.

5. The reflection-type pulse rate detection device against motion interference of claim 4, wherein the different wavelengths comprise a first wavelength and a second wavelength, wherein the first wavelength is used for detecting pulse wave analog signal, and the second wavelength is mainly used for following the motion interference signal.

6. The reflection-type pulse rate detection device against motion interference of claim 5, wherein the intensity of the light emitted from the first LED luminous tube and the second LED luminous tube is controlled by the circuit driving module.

7. The reflection-type pulse rate detection device against motion interference of claim 4, wherein the first LED luminous tube and the second LED luminous tube are both Red/Green double color LED.

8. The reflection-type pulse rate detection device against motion interference of claim 5, wherein the detection circuit, the filter circuit and the subtraction circuit preprocess a pulse wave analog signal, which is then received by the microprocessor control module.

9. The reflection-type pulse rate detection device against motion interference of claim 8, wherein the processed pulse wave signal is capable of being displayed on a local display module or a remote terminal for display through the ultra-low power wireless transceiver module.