SKX-2000D ECG Signal Simulator Instructions for use

This simulator can generate the following waveforms, and the first code represents the following waveforms

- ★ Normal ECG waveform
- ★ Positive and negative triangle waveforms
- ★ Irregular heart rate waveforms (4 in total)
- \star Square wave, which uses a square wave to measure the scanning speed
- ★ Sine waves, which measure amplitude-frequency characteristics
- ★ Simulate Resp waveform
- ★ Calibration waveform 1mV
- ★ Sets the amplitude of the signal

Note:

(1) When the simulator is powered on, a normal ECG waveform of waveform 1 is automatically generated.

(2) The LED display tube of the simulator, in order to prevent the user from forgetting to turn off the power during use, the system is designed so that when there is no operation button within 24 hours, the CPU will enter the standby state in order to save power and turn on again

will work. Press any button to reset the timer to zero.

(3) ECG machine connection: RA-R (right hand), LA-L (left hand), LL-F (left leg), RL-RF (right leg), C1-C6 thoracic guide

(4) Monitor connection: RA - right hand (white), LA - left hand (black), LL - left foot (red), RL - right foot (green), C1-C6 chest guide (brown)

(5) Three-lead connection method: RA - right hand (white), LA - left hand (black), LL - left foot (red)

(6) European standard corresponding: L-LA R-RA RF(N)-RL F-LL C-V

Button description

There are four buttons, which are select, increase, decrease, confirm, and a set of key combinations

1、Select the key

This button is used to select the parameters to be changed, and there are 4 LED tubes to display 4 codes, which represent the displayed content.

1 represents the waveform code, 2-4 represents the parameter to be changed (2 is the hundred digits of the value, 3 represents the ten digits, and 4 represents the single digits) The highlight of the lower right foot of the LED tube, indicating the content selected now; Changes can be made. 2、Add keys

Use this key to make parameter changes when you have selected the changes using the selection key.

3、Decrease the key

Use this key to make parameter changes when you have selected the changes using the selection key.

4、Confirm key

When the parameter is changed, this key confirms the parameter change and generates the corresponding waveform.

5、Key combinations

Press the select button at the same time, press the confirm button again, release the confirm button, release the select key, this means that a key combination is selected, and when you press the confirm button again, different content will be displayed.

The operation method of each waveform is explained separately

1. Normal ECG waveform

- ★ Heart rate setting range: 10-200bpm; (default: 60 bpm)
- ★ The signal amplitude is fixed.
- 2. Positive and negative triangle waveforms
- ★ Frequency range: 10-400bpm; (default: 75 bpm)
- ★ Amplitude range: 0.1-4mV (10: 0.1mV, 400: 4mV);
- \star 2 modes, mode 1: positive waveform, mode 2: negative waveform; Select by key combination.
- 3. Irregular heart rate waveform
- ★ Frequency range: 10-250 bpm (initial value: 80 bpm)
- ★ Amplitude range: 0.1-4mV (10: 0.1mV, 400: 4mV);
- ★ 2 modes, mode 1: large waveform at the bottom; Mode 2: Large waveform on top; Select by key combination.

4. Square Wave

- ★ Frequency range: 0.1Hz-10Hz (10:1Hz 100:10Hz); (Initial value: 1 Hz)
- ★ Amplitude range: 0.1-4mV (10: 0.1mV, 400: 4mV);
- 5. Sine waveform
- ★ Frequency range: 1-100Hz; (Initial value: 10 Hz)
- ★ Amplitude range: 0.1-4mV (10: 0.1mV, 400: 4mV);
- 6. Simulated Resp waveform (may not have signal for some models)
- ★ Frequency range: 1-100 times/min. (Initial value: 15 bpm)
- \star Note that the ECG signal is ignored at this point, the respiratory leads are RA-LL, and the

baseline impedance is 1K, so use an ECG lead wire without resistance.

- 7. Calibration signal
- ★ Frequency range: 30-60bpm
- ★ Pulse width: 100ms
- 8. Signal amplitude setting
- ★ Amplitude range: 0.1mV-4mV (10: 0.1mV, 400: 4mV); (default: 100 1mV)