

Abstract

This invention discloses a method and system to evaluate human emotional state based on human skin resistance measurement. The method in the invention comprises steps: parameters initialization, human skin resistance data collection, data analysis, and emotional state value feedback to user. The data analysis includes raw data pre-processing, and resistance threshold value analysis, slope analysis, comprehensive analysis of slope and fluctuation duration, and comprehensive analysis of slope, fluctuation duration, and resistance threshold value. The system in the invention comprises medical sensor heads, the bridge circuit to measure resistance/conductance, amplifier circuit, A/D converter circuit, CPU, and human machine interactive interface. The invention applies an adaptive algorithm, using changes in resistance value, slope, and state duration to reflect emotion, to overcome the individual difference problem and to evaluate the excitement level of test subjects more precisely.

Fig. 1