R Calculation:

$$R = \frac{\log(\frac{\text{Red}_{\text{rms}}}{\text{Red}_{\text{DC}}})}{\log(\frac{IR_{RMS}}{IR_{DC}})}$$

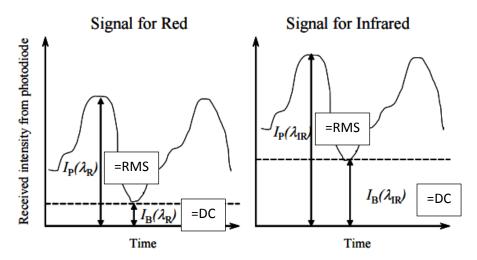


Figure 2 - Received Photodetector Signals

http://www.imt.liu.se/FoUtb/kurser/oxikurs/restricted/pulseoximeters equations and theory-stephen kennedy.pdf