## **Example for HRV Histogramm** "Good vs. Bad Regulation" **Description Histogramm of Heart rate variability (HRV)** of the "Training Session" screen Number of heartbeats (in %) during the measurement period measured with ECG. Histogramm Histogramm Tachykardie Normokardie Bradykardie normocardia tachycardia bradycardia The values are collected in a cluster of 60 seconds and update the display of the measured values in the histogram every 60 seconds. Current SpO, value Current Heart Rate (HR) measured with measured with *Here is an example* for the pulsoximeter pulsoximeter interpretation of the measured **Current oxygen** values: **value** O<sub>2</sub> in the system 60 Heart rate (heartbeats per minute) many bars = a lot of parasympathetic **few bars = little parasympatheticus** 76 14 6.4 In the histogram, the measured RR distances are divided into fixed time ranges, e.g. 60 bpm - 65 bpm, etc. The percentage of the values in a time range becomes visible in the height of the bar. The more bars are present in width, the more variable the heart beats, the better the autonomic nervous system can regulate. Cycle 4300 If you only have one or two bars (right histogram), this means that the measured RR intervals are almost identical. The current cycle Accordingly, the heart is full throttle to be efficient. It does not adapt individually. and the total number of cycles are shown. The distribution should be similar to a Gaussian curve. The countdown 41:12 displays the remaining duration of the current hypoxia or Respiratory rate (RR) hyper/normophase. measured with system and mask. 14 6.4 [BRPM] [l/min] **Breath Rate Per Minute** Respiratory minute volume [l/min] Altitude [m] ASL (Above Sea Level) Status bar for Hypo- and Hyper-/Normo-Time **Current total time** The simulated altitude is calculated from current oxygen O2 in the system. 410 The respective status bar visualizes the remaining of the training session. 840 For the calculation of the altitude please refer to the attached table (separate pdf-file). time of the phase to be completed. Time runs backwards 1290 and shows the remaining 2250 Example for the calculation of altitude from oxygen in 1% steps. -> The status bar for the hypoxia phase starts from the top. total training time 2760 3310 The status bar for the normo and hyperoxia phase starts 3890 from the bottom. 4500 5160 5870 11 12 6640 Control panel for changing the training parameters The control panel is the only area that allows the modification of training parameters. Touching on a button or an arrow field opens the following Popups on which you can change the values and confirm or cancel: Popup for changing Popup to Popup to stop Popup to Popup for changing **STOP** SpO, value with training session change minutes O, value change minutes of hyper/normo pushed buttons of hypoxia cycle cycle