Expert Assessment (EA)

Expert Assessment monitor the effect of certain resting activities or therapeutic interventions on the autonomic nervous system, for example, before, during and after relaxation, meditation or exposure to music.
Expert Assessment allows you to see changes in your autonomic nervous system in real time. It also produces a report that is displayed in the *Results*. This history can be exported, downloaded and saved as a PDF file for review, allowing you to compare data from different measurements.

While running Expert Assessment, values that are **decreasing** are displayed **in pink**; values that are **increasing** are displayed **in blue**; and values that are **constant** are displayed in **black**. Values that are within **normal range** of your age group are displayed **in green**; values that are **outside of the reference range** for your age group are displayed **in red**.

EXPERT ASSESSMENT INSTRUCTIONS

Sit in a quiet, comfortable space, and avoid distractions or disturbances.
Switch on the oximeter or activate your Polar H7 belt.

Open the app and wait until the app shows that the oximeter is connected.
Chose “RUN” from the main menu.
In the Device section you can select the sensor (Oximeter / Polar 7 belt)
Press ‘Expert Assessment’ and the Expert Assessment page will appear.

Press the blue arrow at the bottom to start the assessment.
An instruction page will open and, after reading it, press start in the lower right-hand corner.

The next page that opens will show the following components:

- A count up timer
- A power spectrum graph that indicates:
  Red – LF – predominantly sympathetic – strain and tension
  Orange – MF – sympathetic and parasympathetic – engagement
  Blue – HF – parasympathetic – relaxation and recovery
  A real-time table with autonomic data:
  SDNN, VLF, LF, HF, LF/HF, MF/LF, HF/[LF+HF] (see below)

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HOW TO READ THE REAL-TIME DATA (LIFE) PAGES

On these pages, you will see from the top down:

A second counter that will show you the duration of the assessment (count up timer).

Stop

- To end the measurement

Plethysmograph

- This graph shows you the pulse curve—its regularity indicates that your hand is resting and that the pulse signal is being picked up in a stable fashion.

Power Spectrum of Heart Rate Variability:

- **Red** = predominantly sympathetic activity – **strain**
- **Gold** = sympathetic & parasympathetic activity – **engagement, flow**
- **Blue** = parasympathetic activity – **relaxation, recovery**

❖ Real-Time Data (Life)

Reference ranges are displayed next to the measured and calculated data.

HR & SDNN ranges are displayed age-adjusted. All other data also changes with age, as sympathetic and parasympathetic activity decline with age, and the balance shifts towards dominance of sympathetic activity. Nevertheless, age-adjusted reference ranges for this data are not available.

HR – heart rate (reflects autonomic balance and fitness)

SDNN – standard deviation between two heartbeats – measures the intensity of speeding the heartbeat up and slowing it down within seconds. It is a measure of the body's health-promoting rhythm and flexibility; it declines with age and poor emotional and physical health. A decline also indicates an increased risk of becoming ill.

LF – low frequency – sympathetic activity – strain, tension – alert & mobile – fight or flight

HF – high frequency – parasympathetic activity – recovery, relaxation – tending & befriending – freeze or flop

LF/HF – low frequency/high frequency – autonomic balance – strain/recovery

MF/LF – mid frequency/high frequency – engagement ratio – capacity to engage or be in the zone (flow state)

Expert Assessment (EA)

HF/[LF+HF] – high frequency/ low frequency + high frequency – relaxation ratio – measure for overall relaxation or recovery – high when traumatised or exhausted. This is because the body uses parasympathetic activity as a physiological emergency recovery strategy.

❖ Data to Focus on when Running Expert Assessment

When values are increasing, they will be displayed in violet.
When values are constant, they are displayed in black.
When values are decreasing, they are displayed in dark blue.

(RR) stands for Reference Range.
(RR) Values outside the reference range (too high or too low) are displayed in red.
(RR) Values inside the reference range (normal) are displayed in green.

Should you suspect that you suffer from a physical, emotional or mental health problem, or should any of the autonomic data collected be persistently outside the recommended range, please see your health care professional or therapist for advice.