



EMVIO is the first watch that measures stress and reduces it by helping users analyze their daily stress triggers. Meant to be worn anytime, anywhere, Emvio makes continuous stress management convenient for people on-the-go.

Emvio calculates stress levels by measuring heart rate variability (HRV) and using a proprietary algorithm. The result is a stress level on a scale of 0 to 10. When the user's stress level remains at higher levels over several hours, the watch will alert him or her so that steps can be taken you to reduce stress.

Over time, personal data can be analyzed using the Emvio smartphone app, so that users can see which events cause their emotions to spike.



From the Outside In

Emvio will be available in both a glossy plastic and chrome steel. The LED display is both scratch-resistant and discreet, and is navigated by touch buttons on the left and right of the display.

When it notifies users about changing stress levels, Emvio vibrates and the indicator light below the display will glow green, yellow, or red.

The team at Darta Systems has been researching the algorithm to measure stress accurately for the past two years. Much of this work has gone into improving the optical sensors and accelerometers used for pulse measurement.

Emvio also tracks physical activity, calories burned, and steps taken.

The Emvio App

Emvio works best when used in conjunction with the accompanying smartphone app. From left to right:







- The dashboard displays current stress level, the day's events, and activity stats for the day.
- When stress levels change from medium to high, the app will remind users to make note of what
 caused the increased stress. This journal feature can be used to gather data over the long run,
 making it easier to determine hidden stressors.
- If the stress level becomes hazardous to the health, the app gives actionable tips for reducing stress.
- Users can also share stress levels, events, and their lifestyle changes on social media.

Technical Specifications

- Besides the optical sensors for measuring pulse rate, Emvio also uses a 3-axis accelerometer to both compensate for a user's movement in calculating stress and measure physical activity.
- The watch contains a 32-MB Flash memory, and the Ultra-Low-Power ARM Cortex-M3 MCU.
- The watch uses a Bluetooth Low-Energy connection to relay data to one's smartphone, and all data will be synced automatically.
- For now, Emvio will be iOS compatible only, with an Android app available at higher funding levels.
- Emvio will be first available with a plastic case. The Romeo men's watch measures 37 x 47 mm with a dark grey case. The Juliet women's measures 34 x 47 mm with a white case. Bands will be slate gray.
- The second and third waves of Emvio watches will feature more color options for the bands: white, black, lime green, fuschia, and cherry red.

Top row: Emvio Romeo for men. Middle row: Emvio Juliet for women. Bottom row: Emvio Elites with a chrome steel case, in both men's and women's sizes.



About Darta Systems

At every step of the way, our aim at Darta Systems is to help people improve the quality of their lives through stress management.



- We have offices located in both Moscow, and Ottawa, Canada. We were also fortunate to team up with Simplicity Design, a full-cycle design firm from Asissi, Italy, to create Emvio's look and feel.
- In 2013, we began developing the models, testing techniques, and prototype software at the heart of Emvio.
- Pre-orders: We will launch our Kickstarter campaign on March 17, 2015, and we are excited to bring this product from the medical labs into people's lives.