



# USER GUIDE

YOUR WAVEBAND<sup>®</sup>

- 1 Power button
- 2 LED status indicator
- 3 App controls\* (ex. volume)
- 4 Charging terminals
- 5 Heart rate sensors



\* only available with some party apps

## GETTING STARTED

---

## STEP 1: DOWNLOAD THE MINDJA™ HRV APP



Coming soon



---

## STEP 2: FIT AND POWER ON WAVEBAND®

- Waveband® can be worn anywhere on your arm
- LED will flash alternating RED/BLUE when waiting to pair with App

---

## STEP 3: LAUNCH THE MINDJA™ HRV APP

- If prompted to turn on Bluetooth, click **ALLOW**.
- Waveband® will automatically connect to the Mindja™ App. (LED will flash PURPLE)
- Let Mindja™ walk you through the Interview to personalize and begin your training experience.

HEART RATE VARIABILITY  
ABC(D)'S

---

## ABOUT

- Mindja™ is a Heart Rate Variability (HRV) training tool.
- HRV training strengthens the Autonomic Nervous System (ANS) much like physical training strengthens muscles.
- Benefits of ANS strengthening via HRV training include reduced stress, improved heart health, improved sleep quality and many other physical and psychological benefits.

---

## BASICS

- Find a quiet environment with few distractions for training.
- HRV can be controlled & trained through paced breathing.
- Perform the Mindja™ Breathing Assessment to get your best breathing rate (resonant frequency (RF)), or you can set your own rate during training.
- Follow the breathing pacer to train your HRV and train your ANS.
- Train during free moments or as a break when stressed to boost resilience.
- Be relaxed & still during training as excessive movement causes artifact that may invalidate results.

---

## CONSISTENCY (TRAINING PROGRAM)

- HRV training can be performed daily, once or more **times per day**.
- Each session should be a minimum of **5 minutes**.

- A total of 10 – 20 minutes should be performed at least **4-5 days** per week.
- Just like the gym, keeping a regular training schedule maximizes benefits.

---

## DEVELOPMENT/SUCCESS

- The History section of Mindja™ keeps session statistics over time.
- Measures of improvement include
- Lower stress scores
- Lower resting heart rate (to within medically recommended range)
- Higher resting RMSSD (change in time between successive heart beats)
- Higher scores in the Mindja game
- Subjective feelings of calmness and more control over stress
- Improved sleep

# GETTING TO KNOW MINDJA™

---

## MAIN MENU ICONS



Baseline

Runs a 1-minute measurement to obtain baseline statistics for comparison to training sessions.

This can be run and updated periodically as you improve.



Breathing Assessment

Runs a 7-minute paced breathing assessment to determine your personal ideal breathing rate for training, your personal Resonant Frequency (RF).



Training

Runs a timed training session providing a breathing pacer, real-time physiology statistics and graphical views of heart rate and stress.



Game

Runs a Mindja™ game session. A fun, interactive HRV training session with an optional breathing pacer, live physiology statistics and game challenge levels.



History

Provides a historical view of multiple data statistics including current baselines and session data (heart rate, RMSSD, stress score, game score)



Settings

Provides configurable elements including user demographics, user baseline heart rate and stress score, and personalized breath pacer Resonant Frequency setting.

## SCREEN FEATURES

---

### GENERAL USE FEATURES

Mindja™ is set up for ultimate ease of use and understanding. All information is easily accessible on every screen, no need to flip in-and-out of help menus.

- **Long press** any ICON and Mindja pops out with useful information.
- **Tapping** the HEART, LUNGS or SMILEY icons will prompt the display of the associated measurement prominently inside the breath pacer circle.
- **Pop-outs** inform about each screen as you experience the app.

---

## SCREEN DETAIL

1

Play/Pause

2

Hide/View screen graphics

3

4



---

Set session time

---

General Settings

---

Stress score to beat. Keep stress below this number to gain points and progress through levels

---

Breathing pacer controls.

Increase (+) or decrease (-) breathing rate

---

Main Display. Displays live data based on selection of bottom button pressed:

Heart rate ( ), Breathing pace ( ), Stress ( )

---

Shows live/current stress score in Main Display

---

Shows current breathing rate setting in Main Display

---

Toggles between live Heart rate, R-R interval, RMSSD and shows this data in Main Display

---

Current session time remaining

---

Breathing pacer. Inhale when increasing, exhale when decreasing

---

Current session time progress. Graphic display of percent of session time completed

---

Real time stress score tracked over past 1 minute

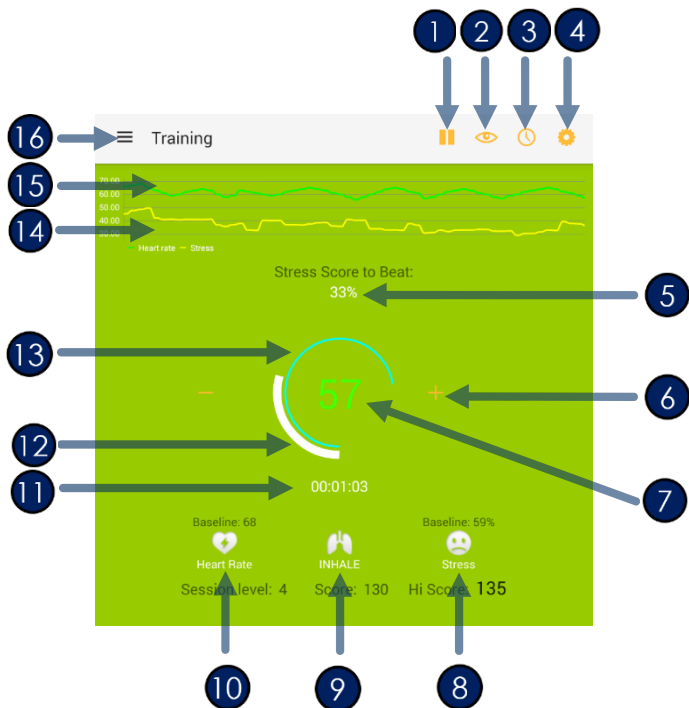
---

Real time heart rate tracked over past 1 minute

---

Main menu

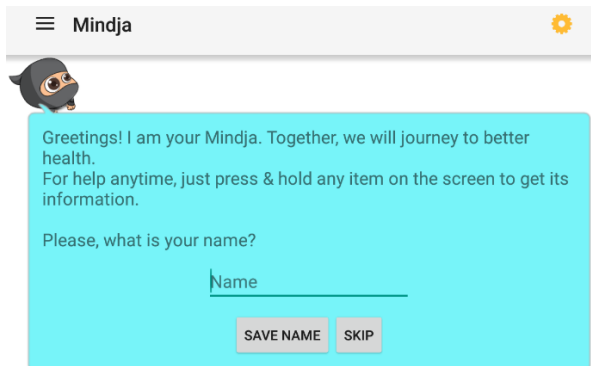
---



# APP FLOW

## 1. WELCOME TOUR

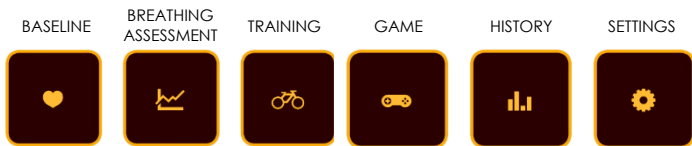
Let Mindja™ walk you through a simple 4-step personalization and get you started with your first training session.



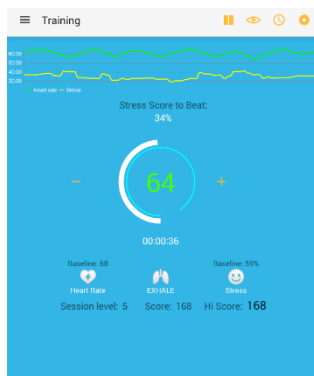
- 1) **INTERVIEW:** A short series of interview questions to collect relevant user information.
- 2) **BASELINE:** A 1-minute baseline measurement to obtain a benchmark for training success comparisons.
- 3) **PERSONAL BREATHING RATE:** A 7-minute paced breathing session to determine the user's individual best breathing rate for training, the users RESONANT FREQUENCY (RF).
- 4) **TRAINING:** A short training session letting the user experience a HRV training session and explore screen tools.

## 2. SELF-GUIDED USE

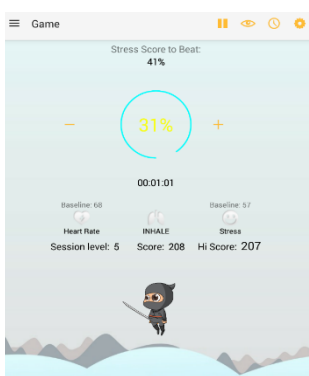
From the main-menu choose from Training or Game sessions to improve your HRV, or run new baselines, review your history or change settings.



### TRAINING SCREEN



### GAME SCREEN



# KEY TERMS

---

Baseline	A starting point measure providing multiple HRV statistics used to show progression/change over time. Compare training session results to baselines to track improvements.
Breaths per minute	The average number of breaths (inhalation-exhalation cycle) over a one minute period. Used to set the speed of the breathing pacer and guide breathing rate during HRV training.
Heart rate	The speed of the heart beat displayed as the average number of heart beats per minute.
Heart rate variability (HRV)	The variation in the time interval between heart beats measured by the changes in the beat-to-beat interval. Inputs to the SA node of the heart from the Sympathetic and Parasympathetic nervous system are main contributors to HRV.
R-R interval	The time elapsing between two consecutive R-peaks (heart beats) in the electrocardiogram (ECG). The changes in these intervals are used to calculate HRV metrics.
Resonant frequency (RF)	The breathing rate that maximizes the oscillations in the heart rate and produces maximum HRV. Breathing at ones RF improves the effectiveness and benefits of HRV training.

---

RMSSD	Root mean square of standard deviation of R-R intervals (RMSSD) is a measure of HRV, which reflects the function of the Vagus Nerve-mediated control of heart beats. Higher RMSSD is generally associated with heart health and improved resilience and lower mental and physical stress.
Score	Number of points gained during a HRV training session. Points are accumulated at 1, 2 or 3 points per second based on comparing users current Stress Scores to the Stress Score to Beat.
Stress level	An indicator of mental or physiological stress expressed as a percent (out of 100%) derived from the RMSSD measure. Lower scores reflect less stress in the nervous system.
Stress score to beat	An automatically set Stress Score the User must beat (get below) in order to score points in Mindja training screens. This score changes automatically (auto-thresholds) in order to optimize the balance between challenging the user and providing training success.

# DATA QUALITY & SAFETY TIPS

## WAVEBAND® AND MINDJA™ GENERAL USE

- Improper use of the Waveband® or Mindja™ app may invalidate heart rate measures and results.
- the band should be securely fit to the arm location and not allow ambient light to enter
- arm movement during HRV training can induce artifacts that may invalidate results
- large variations in heart rate during HRV training (for example from movements or changing activities) may cause invalid results.
- there may be delays in communication and display of data when using many Bluetooth devices between the time of the actual physiological phenomenon (ex. a heartbeat) and the actual display of the data and associated metrics on a device. This delay may at times be apparent but effective training can still occur.
- If you feel light headed or uncomfortable, cease HRV training, breathe normally and increase the breathing pace to a comfortable level in future training sessions.
- Consult a physician if you have any history of cardiac problems, have been warned of any possible cardiac risk factors or feel uncomfortable with training.
- The Waveband® and Mindja™ app are not medical devices and neither product is intended nor should be used for any medical diagnosis, treatment, measurement, monitoring or decision-making.

# TERMS & CONDITIONS

---

## ACCEPTANCE OF TERMS & CONDITIONS

Welcome to **Evoke Neuroscience, Inc.** ("**Evoke Neuroscience**", "**we**" or "**us**"). Your access to any content, services or products offered by Evoke Neuroscience is subject to the following terms and conditions. By accessing or using Evoke Neuroscience products, services or website, you agree that you have read, understand, and agree to be bound to these terms and conditions, as they may be amended from time to time, as well as to the terms of our [privacy policy](#), and [online terms and conditions](#), which is hereby incorporated into these terms and conditions. You are responsible for periodically reviewing these terms and conditions for applicable changes, and your continued use of Evoke Neuroscience products, services or website after we have posted changes to these terms and conditions constitutes your acceptance to those changes. If you disagree with these terms and conditions (as they may be amended from time to time), or are dissatisfied with this website, your sole and exclusive remedy is to discontinue using Evoke Neuroscience products, services or website.

---

## USE LICENSE

Permission is granted to use the Waveband<sup>®</sup> and Mindja™ app for personal, non-commercial use. This is the grant of a license, not a transfer of title, and under this license you may not:

1. modify or copy the materials;
2. use the materials for any commercial purpose, or for any public display (commercial or non-commercial);
3. attempt to decompile or reverse engineer any software contained in the hardware or software;
4. remove any copyright or other proprietary notations from the materials; or
5. transfer the materials to another person or "mirror" the materials on any other server.

This license shall automatically terminate if you violate any of these restrictions and may be terminated by Evoke Neuroscience at any time. Upon terminating your viewing of these materials or upon the termination of this license, you must destroy any downloaded materials in your possession whether in electronic or printed format.

---

## DISCLAIMER

The materials from Evoke Neuroscience are provided "as is". Evoke Neuroscience makes no warranties, expressed or implied, and hereby disclaims and negates all other warranties, including without limitation, implied warranties or conditions of merchantability, fitness for a particular purpose, or non-infringement of intellectual property or other violation of rights. Further, Evoke Neuroscience does not warrant or make any representations concerning the accuracy, likely results, or reliability



of the use of the information provided by Evoke Neuroscience or the Waveband<sup>®</sup> or Mindja™ app.

---

#### **LIMITATIONS**

In no event shall Evoke Neuroscience or its suppliers be liable for any damages (including, without limitation, damages for loss of data or profit, or due to business interruption,) arising out of the use or inability to use the materials from Evoke Neuroscience, even if Evoke Neuroscience or a Evoke Neuroscience authorized representative has been notified orally or in writing of the possibility of such damage. Because some jurisdictions do not allow limitations on implied warranties, or limitations of liability for consequential or incidental damages, these limitations may not apply to you.

---

#### **MODIFICATIONS TO THE SERVICE AND FEES**

Evoke Neuroscience reserves the right to modify, suspend, or discontinue the Service at any time for any reason with or without notice.

Evoke Neuroscience reserves the right to change our fees and pricing structure without prior notice to current or future customers. Fee change notices may be posted to the "Terms of Service" or on the Evoke Neuroscience Website.

---

#### **REVISIONS**

The information and materials provided by Evoke Neuroscience, the Waveband<sup>®</sup>, Mindja™ app or Evoke Neuroscience website could include technical, typographical, or photographic errors. Evoke Neuroscience does not warrant that any of the materials provided are accurate, complete, or current. Evoke Neuroscience may make changes to the above stated materials at any time without notice. Evoke Neuroscience does not, however, make any commitment to update the materials.

---

#### **LINKS**

Evoke Neuroscience has not reviewed all of the sites linked to its App or Website and is not responsible for the contents of any such linked site. The inclusion of any link does not imply endorsement by Evoke Neuroscience of the site. Use of any such linked web site is at the user's own risk.

---

#### **TERMS OF USE MODIFICATIONS**

Evoke Neuroscience may revise these terms of its products and website at any time without notice. By using Evoke Neuroscience products you are agreeing to be bound by the then current version of these Terms and Conditions of Use.

---

#### **INTELLECTUAL PROPERTY**

The trademarks, service marks, trade names, trade dress, and products used or listed on this website are protected in the United States and internationally. No use of any of these may be made without our prior, written authorization, except to properly identify the products or services of the company.

---

## GOVERNING LAW

You agree that these terms and conditions describe the entire agreement between us with respect to its subject matter. The laws of the state of New York will control the terms and conditions provided in these terms and conditions, without giving effect to any principles of conflict of laws. If a court of competent jurisdiction finds that any provision of these terms and conditions is invalid or unenforceable, you agree that the other provisions of these terms and conditions will remain in full force and effect. You agree that regardless of any applicable law to the contrary, you cannot file a claim or cause of action arising out of or related to your use of Evoke Neuroscience products or information or these terms and conditions more than one (1) year after such claim or cause of action arose. No waiver of by us of any term or condition set forth in these terms and conditions shall be deemed a further or continuing waiver of such term or condition or a waiver of any other term or condition, and any failure by us to assert a right or provision under these terms and conditions does not constitute a waiver of such right or provision.

If any provision of these terms and conditions is held by a court or other tribunal of competent jurisdiction to be invalid, illegal or unenforceable for any reason, such provision must be eliminated or limited to the minimum extent such that the remaining provisions of the terms and conditions will continue in full force and effect.

Please direct your feedback, comments, requests for technical support and other communications relating to the website to: [info@evokeneuroscience.com](mailto:info@evokeneuroscience.com).

# DISCLAIMER

---

## MEDICAL DISCLAIMER

Evoke Neuroscience does not assume any liability for the materials, information and opinions provided through, posted to, or otherwise available through, Evoke Neuroscience. Reliance on these products, materials, information and opinions is solely at your own risk. Evoke Neuroscience disclaims any liability for injury or damages resulting from the use of the products, or the content contained thereon. The data contained in Evoke Neuroscience products, including the text, images, and graphics, are for informational purposes only. Use of the Waveband® · Mindja™ app or Evoke Neuroscience products and website is not intended to be a substitute for professional medical, coaching and/or training judgment and you should promptly contact your own health care and/or provider regarding any medical conditions or medical questions that you have. The Waveband® · Mindja™ app or Evoke Neuroscience website do not offer medical advice, and nothing contained in the content is intended to constitute professional advice for medical

diagnosis or treatment. Evoke Neuroscience accepts no responsibility for the correctness of any diagnosis based in whole or in part upon the use of Evoke Neuroscience products. The information provided reflects the current view of the individual author and do not necessarily represent the view of Evoke Neuroscience or other contributing institutions, nor does inclusion in the app or on the site of advertisements for specific products or manufacturers indicate endorsement by Evoke Neuroscience.

Although great care has been taken in compiling and checking the information given to ensure accuracy, Evoke Neuroscience, the authors, their employers, the sponsors, and their servants or agents shall not be responsible or in any way liable for any errors, omissions, or inaccuracies, whether arising from negligence or otherwise, or for any consequences arising therefrom.

Disclaimer of warranties. Evoke Neuroscience products and content are provided "as is." Evoke Neuroscience makes no representations or endorsement about the suitability for any purpose of products and services available through their products. We do not guarantee the timeliness, validity, completeness, or accuracy of the content. We disclaim all warranties and conditions, either express or implied, including but not limited to implied warranties of merchantability, fitness for a particular purpose, title, and non-infringement, with regard to the content, products, services, and all other information contained on and/or made available through Evoke Neuroscience. Although we may update the content of Evoke Neuroscience products from time to time, please note that training and medical information change rapidly. Therefore, some of the information may be out of date and/or may contain errors. Because some jurisdictions do not permit the exclusion of certain warranties, these exclusions may not apply to you. Evoke Neuroscience is not responsible for the usage or interpretation of exported data.

Evoke Waveband is powered by PerformTek technology.

PerformTek® Precision Biometrics is a patent-protected sensor technology which continuously measures real-time biometric data with a high degree of accuracy and consistency, and uses this data to give people *meaningful fitness assessments*. It seamlessly integrates into audio earbuds and other wearable devices, such as armbands and wristbands, and can connect with smartphone apps people are already using while exercising. PerformTek® sensor technology allows you to capture accurate data such as heart rate, distance, speed, cadence, calories burned and VO<sub>2</sub> max (aerobic fitness level).

PerformTek® and the PerformTek® design are registered trademarks of Valencell, Inc. and may not be used for any purpose without the express prior written consent of Valencell, Inc. Patent: [www.valencell.com/patents](http://www.valencell.com/patents)