<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Intended Use</td>
</tr>
<tr>
<td>3</td>
<td>System Requirements</td>
</tr>
<tr>
<td>3</td>
<td>Safety Information &amp; Cautions</td>
</tr>
<tr>
<td>4</td>
<td>Specifications</td>
</tr>
<tr>
<td>4</td>
<td>Components</td>
</tr>
<tr>
<td>6</td>
<td>Apps</td>
</tr>
<tr>
<td>6</td>
<td>Achieving The Best Results</td>
</tr>
<tr>
<td>7</td>
<td>Setup &amp; Testing (iOS)</td>
</tr>
<tr>
<td>7</td>
<td>1. Downloading the app</td>
</tr>
<tr>
<td>7</td>
<td>2. Setting up &amp; registering the app</td>
</tr>
<tr>
<td>8</td>
<td>3. Creating a profile</td>
</tr>
<tr>
<td>8</td>
<td>4. Pairing</td>
</tr>
<tr>
<td>9</td>
<td>5. Testing</td>
</tr>
<tr>
<td>10</td>
<td>6. Extra functions</td>
</tr>
<tr>
<td>11</td>
<td>Setup &amp; Testing (Android)</td>
</tr>
<tr>
<td>11</td>
<td>1. Downloading the app</td>
</tr>
<tr>
<td>11</td>
<td>2. Setting up &amp; registering the app</td>
</tr>
<tr>
<td>12</td>
<td>3. Creating a profile</td>
</tr>
<tr>
<td>12</td>
<td>4. Pairing</td>
</tr>
<tr>
<td>13</td>
<td>5. Testing</td>
</tr>
<tr>
<td>14</td>
<td>6. Extra functions</td>
</tr>
<tr>
<td>15</td>
<td>Results Screen</td>
</tr>
<tr>
<td>15</td>
<td>Personal Online Dashboard</td>
</tr>
<tr>
<td>16</td>
<td>Troubleshooting</td>
</tr>
<tr>
<td>17</td>
<td>Support</td>
</tr>
</tbody>
</table>
Intended Use

iHeart is intended to help you recognize the health benefits of regular exercise, good diet, stress management and other aspects of healthy living. iHeart Internal Age readings will show gradual improvement as you optimize your lifestyle and help you to recognize exactly what does and does not work for you personally. iHeart is not meant to perform any medical functions. It is not a medical device and should not be used to diagnose or manage any medical condition. iHeart is intended for users aged 18-80 years.

System Requirements

To operate iHeart you’ll need the following:

- iHeart fingertip device
- Smartphone or tablet:
  - iPhone 4S+ or later
  - iPad 3rd generation or later
  - Any Android phone/tablet running Android 5.0 or later
- The iHeart Internal Age app, available in the Apple App Store and Google Play Store

Safety Information & Cautions

The User Manual, including all precautionary information and instructions, should be read before use. Always use iHeart as indicated in this manual, including finger selection and finger positioning in the sensor.

**Warning:** Do not adjust, repair, open, disassemble, or modify this unit. Injury or equipment damage could occur. Return unit for servicing.

Do NOT use a sensor or cable with exposed optical or electrical components. Do NOT use damaged sensors or cables.

**Caution:** Do not autoclave (steam sterilize) or submerge the equipment in any cleaning solution. This will seriously damage the unit.

**Caution:** Bright lights (including overhead lighting fixtures, pulsating strobe lights and direct sunlight) directed on the sensor, may prevent the system from acquiring valid readings.

**Caution:** Keep your finger and body still and refrain from speaking during
recordings. Failure to apply the sensor properly may lead to incorrect measurements.

Note: Inaccurate readings may be caused by:

- Externally applied colouring and texture (nail polish, acrylic nails, glitter, etc.)
- Severe anemia
- Low arterial perfusion (cold hands should be warmed before use of the iHeart System)

**Specifications**

Oximeter Parameters Displayed: SpO2, Pulse Rate
SpO2 Range: 35-100%
SpO2 Accuracy: ± 2% (80% - 100%); ± 3% (70% - 79%)
SpO2 Resolution: 1%
Pulse Rate: 25-250 beats per minute
Pulse Rate Accuracy: ± 2 beats per minute
Pulse Rate Resolution: 1 beat per minute
Battery: One 3.7 V lithium battery (BM2000) and 2 AAA batteries (BM1000)
Working Voltage: BM1000 DC 2.2 - 3.4V, BM2000 DC 3.4 - 4.3V
Power Consumption: = 50 mA
Transportation and Storage Temperature: 20 - 70°C
Transportation and Storage Humidity: 10 - 93%
Transportation and Storage Atmospheric Pressure: 50 - 106 kpa

The iHeart display of SpO2 is intended for short term use by individuals aged 18-80 for personal fitness training purposes. iHeart’s SpO2 readings are not recommended as a means of monitoring any medical conditions and should not be relied on for any medical purpose.

**Components**

**iHeart Fingertip Device**

The iHeart device is used in conjunction with the iHeart Internal Age or iHeart Pro smartphone app to determine Internal Age. If unpaired with the app, the iHeart device may be used as a simple pulse oximeter by monitoring heart rate and blood oxygen saturation (SpO2) on the device’s LED display. Both versions of the smartphone app use the same fingertip device and are easy to switch between if your needs change. Please see *Fig. 1.*
**Blood Oxygen Saturation (SpO2)**
This number represents your blood oxygen saturation (SpO2), shown as a percentage.

**Heart Rate (bpm)**
This number represents your heart rate, measured in beats per minute (bpm).

**Pulse Shape**
As seen on in-app phone/tablet display

**Bluetooth**
**Flashing:** Device not currently connected to a phone/tablet
**Solid:** Device connected

**Power Button**
Press to turn on iHeart device. Press again to flip display.

**Battery Level**
Apps

iHeart Internal Age

• Free
• 5 user profiles for use with family and friends
• Internal Age, heart rate, blood oxygen saturation
• Personal Online Dashboard access

iHeart Pro

*iHeart Pro is not available for Android

• Subscription required
• 1000 user profiles for use with a client base
• Intended for use by health and wellness professionals
• Internal Age, heart rate, blood oxygen saturation
• Detailed reports emailed to trainer and client
• Personal Online Dashboard access

Achieving The Best Results

iHeart is an extremely powerful and sensitive tool intended to help you make healthier lifestyle choices. There are a few things to keep in mind when taking an iHeart reading to maximize its functionality and your understanding of the results:

• Rest for 2 minutes before testing.
• Take a reading at the start of each day to establish your Baseline. This is the number that you want to see change over time as it is reflective of your overall health.
• iHeart testing will vary from minute to minute and at different points throughout the day due to common fluctuations in blood pressure. By observing trends in your iHeart results you’ll develop a responsive understanding of your internal health. Readings are affected by exercise, stress, and other factors, and tests taken throughout the day can be useful for recognizing short term effects of stress and other lifestyle choices.
Setup & Testing (iOS)

This is a step-by-step walkthrough for setting up the iHeart app. This was created using screenshots from an iPhone. iPad setups may vary in appearance but the required steps are the same.

Android users, please go to page 11 for an Android-specific walkthrough.

1. Downloading the app

1. Open the App Store on your iPhone/iPad.
2. Search for *iHeart Internal Age* (Fig. 2).
3. Select the version of the app you would like to start using and press *Get*.

For more information about the two different apps, please see above. If you do not already have one you may be prompted to create an Apple ID. Credit card details may be requested for account creation but will not be charged. (iHeart Pro users only will later be asked to pay for their subscription.)

4. After the download completes, press *Open* (Fig. 3).

2. Setting up & registering the app

1. If your iPhone/iPad’s bluetooth is not already enabled then you will be prompted to do so when you open the app (Fig. 4). If you are not prompted, please skip this step. Press *Settings* and flick the switch to green. Then press on *<Internal Age* in the top left-hand corner to be taken back to the app.
2. Please read iHeart’s Terms of Use and Privacy Policy and press I Agree to proceed (Fig. 5).
3. You will then be prompted to register your iHeart account. Please enter your email address and create/confirm a new password of your choice, then press Register (Fig. 6).

3. Creating a profile

After registering you’ll be prompted to create a profile. Enter first name, last name, email address, date of birth and gender information (plus photo, height and weight for Pro users) in the fields provided and press Create Profile (Fig. 7).

Create a profile for each user of the device by pressing Profiles in the bottom left-hand corner of the app’s homescreen, then press Create New Profile. Users of the free app can create up to 5 profiles for friends and family members. Users of the Pro app can create up to 1000 profiles for use with a professional client base.

4. Pairing

Your iHeart device will indefinitely pair with your iPhone/iPad on first use automatically. If at any point the pairing is lost, however, follow these steps to pair again.

1. Click on the ⌁ at the bottom right hand corner of the app homescreen (Fig. 8).
2. Turn on the iHeart device and clip it onto your fingertip to prevent it from going to sleep before a pairing can be made.
3. Press *Install New Device*. You may now return to the homescreen and continue testing *(Fig. 9)*.

No notification is shown to confirm pairing but you’ll discover on attempting another test that the pairing has been reestablished.

5. Testing

1. Press *Start Recording* in the centre of the screen *(Fig. 8)*.
2. Clip the iHeart fingertip device onto your index or middle finger (either hand) and turn it on by pressing the power button.
3. Give the app 5 seconds to calibrate and then follow the on screen notification *(Fig. 10)* prior to testing. Tap the notification to make it disappear.
4. Rest your arm on your thigh or a flat surface and allow the on-screen pulse wave display to settle into a consistent rhythm. When the rhythm has settled, press *Start Recording* at the top centre of the screen to begin the 30-second timer.
5. After 30 seconds you’ll be taken to a results screen containing your Internal Age *(Fig. 11)*.

If your reading was unsuccessful for any reason you’ll be prompted to attempt it again *(Fig. 12)*. Please make sure that your fingertips are warm by rubbing your hands together and clenching/releasing your first several times to stimulate blood flow to the fingertips. This will increase the chance of a successful iHeart reading.
6. Extra Functions

To delete a profile, click Profiles in the bottom left-hand corner of the app home screen, then press and hold on the profile you would like to delete and confirm it’s removal (Fig. 13).

To delete a reading from your Trending Graph - History, press and hold the reading on the Trending Graph - History screen and confirm to remove it.

Please see page 15 for information about results.
Setup & Testing (Android)

This is a step-by-step walkthrough for setting up the iHeart app. This was created using screenshots from a Samsung Galaxy S8. Appearance may vary on other devices but the required steps are the same.

iOS users, please go to page 7 for an iOS-specific walkthrough.

1. Downloading the app

1. Open the Google Play Store on your Android device.
2. Search for iHeart Internal Age.
3. Select the free iHeart app by VitalSines International Inc. and press Install (Fig. 14).

If you do not already have one you may be prompted to create a Google account. Credit card details may be requested for account creation but will not be charged.

4. After the download completes, press Open (Fig. 15).

2. Setting up & registering the app

1. If your Android device’s bluetooth is not already enabled then you will be prompted to enable it when you open the app. Press Yes to enable bluetooth (Fig. 16).
2. Please read iHeart’s Terms of Use and Privacy Policy and press I Agree to
3. Creating a profile

After registering you'll be prompted to create a profile. Enter name, email address, date of birth, gender information, and choose a photo (optional) in the fields provided and press Create Profile (Fig. 19).

Create a profile for each user of the device by pressing Profiles in the bottom left-hand corner of the app’s homescreen, then press Create New Profile. Users can create up to 5 profiles for friends and family members.

4. Pairing

Your iHeart device will indefinitely pair with your Android device on first use automatically. If at any point the pairing is lost, however, follow these steps to pair again.

1. Click on the 🔄 at the bottom right hand corner of the app homescreen (Fig. 20).
2. Turn on the iHeart device and clip it onto your fingertip to prevent it from going to sleep before a pairing can be made.
3. Press **Install New Device**. You may now return to the homescreen and continue testing *(Fig. 21)*.

Some devices will show a notification to confirm. On those that do not, you’ll discover on attempting another test that the pairing has been reestablished.

![Install New Device](image)

**(Fig. 21)**

### 5. Testing

1. Press **Start Recording** in the centre of the screen *(Fig. 20)*.
2. Clip the iHeart fingertip device onto your index or middle finger (either hand) and turn it on by pressing the power button.
3. Follow the on screen notification to sit for 2 minutes before testing *(Fig. 22)* and give the app 5 seconds to calibrate.
4. Rest your arm on your thigh or a flat surface and allow the on-screen pulse wave display to settle into a consistent rhythm. When the rhythm has settled, press **Start Recording** at the top centre of the screen to begin the 30-second timer.
5. After 30 seconds you’ll be taken to a results screen containing your Internal Age *(Fig. 23)*.

If your reading was unsuccessful for any reason you’ll be prompted to attempt it again. Please make sure that your fingertips are warm by rubbing your hands together and clenching/releasing your first several times to stimulate blood flow to the fingertips. This will increase the chance of a successful iHeart reading.

![Testing](image)

**(Fig. 22)**

**(Fig. 23)**
6. Extra Functions

To delete a profile, click Profiles in the bottom left-hand corner of the app home screen, then press and hold on the profile you would like to delete and confirm it’s removal.

To delete a reading from your Trending Graph - History, press and hold the reading on the Trending Graph - History screen and confirm to remove it.

*Please see next page for information about results.*
Results Screen

**Internal Age & Aortic Pulse Wave Velocity:** Internal Age is calculated primarily by comparing Aortic Pulse Wave Velocity (AoPWV) to a graph of averages for healthy individuals. Your AoPWV is measured in metres-per-second with slower measurements indicating a more supple aorta and, therefore, producing a lower Internal Age reading.

Conversely, higher AoPWV scores signify a greater aortic stiffness. Stiffness of the aorta is a proven risk assessor for cardiovascular and cognitive disease and will result in a higher Internal Age reading.

This measurement is objective and does not consider actual age or gender in its calculations. For more information about iHeart’s calculation of Internal Age, please visit the blog on our website, *Internal Age: How It’s Measured & What It Means.*

**SpO2 (Blood Oxygen Level):** Your blood oxygen level throughout the 30-second test, averaged. For more information on blood oxygen saturation please visit the blog on our website, *Blood Oxygen Saturation (SpO2) Explained.*

**Average Heart Rate:** Your heart rate throughout the 30-second test, averaged. For more information on resting heart rates please visit the blog on our website, *What Is A Normal Resting Heart Rate?*

**Personal Online Dashboard**

Both versions of the iHeart app come with access to a Personal Online Dashboard. Enable wifi or 3G on the 🌐 Settings screen of the app to allow your iHeart to synchronize with our secure online server, and then access your results on your personal computer. Included in the Personal Online Dashboard is a resource centre with information on how to lower your Internal Age, plus further trending graph information.
Troubleshooting

Q: Why isn’t my iHeart device connecting to my phone/tablet?
A: The iHeart device connects to your phone/tablet via Bluetooth. Please make sure that Bluetooth is enabled on your phone/tablet before beginning an iHeart recording. The phone/tablet and fingertip device should pair automatically the first time you use iHeart. If this does not seem to be the case, click on the 📲 in the bottom right corner of the app home screen, press Install New Device, and turn on the iHeart. Depending on the model of your phone/tablet you may receive a notification that the device has been connected. Do not panic if you did not receive such a notification: they should still have paired.

Q: Why do I keep seeing a recording quality error notification?
A: If motion is detected during testing or if the blood flow to your fingertips is not strong enough, it’s possible that iHeart will not be able to present you with a result. Cold hands or poor circulation can usually be overcome by rubbing your hands together and clenching/releasing your fist a few times to stimulate blood flow. If a second recording quality error appears you can press Save It Anyway followed by View Pulse Analysis to see your result based on the information iHeart was able to gather.

Q: Why aren’t iHeart Pro reports being sent after testing?
A: For reports to be sent to you and your client’s emails, your phone/tablet needs to be connected to wifi to synchronize data with the iHeart cloud. On the 📲 screen of the app, make sure that wifi/3G is enabled and allow the app time to synchronize. When this is complete, reports will be sent to the registered email address and the email address on the testers profile.

If for any reason this is not working correctly, please try quitting and app (double-tap the home button of your phone/tablet and swipe the iHeart Pro app off the screen) and re-open it. The app will begin the synchronizing process, pushing data to the server and sending out any unsent reports. You will notice the words Synchronizing with a percentage in the top right corner of the screen.

Q: Why does my Internal Age sometimes vary from minute to minute?
A: Your body is very dynamic, with blood pressure changing from moment to moment. iHeart is affected by aortic stiffness and blood pressure and your Internal Age will rise and fall with blood pressure-related Aortic Pulse Wave Velocity variation. Blood pressure is affected by exercise, eating, stress, and myriad other factors, and these variations are normal. To obtain stable
readings, refer to *Achieving The Best Results* on page 6.

**Support**

There is an [FAQ on our website](#) that contains further troubleshooting advice and answers to the most common queries. If you still are unable to use your device correctly, or if you have any further questions, please contact us through one of the following methods to speak with a customer support representative.

**Free phone:** +1 (866) 863 2942  
**Email:** support@goiheart.com  
**Web form:** [Click here](#)