

Heart Rate Variability Cardiovascular Health Analyzer



***“Learn How This 1 Minute Test
Could Save Your Life”***

Max Pulse

Heart Rate Variability & Accelerated Photoplethysmography

What is Max Pulse?

The Future of Health Care ANS & Cardiovascular Screening

The Max Pulse provides measurements using Heart Rate Variability to evaluate the Autonomic Nervous System Function and it diagnoses the Cardiovascular disease by using the Accelerated Plethysmography.

It is a useful tool in assisting health-care practitioners in the early detection of cardiovascular related issues. The test will also help assess nutraceutical & pharmaceutical needs.

Through periodic screenings and treatments, one is able to monitor the effectiveness of these changes and how they relate to the person's cardiovascular, autonomic, and overall health status.

► We Analyze

- ❑ Heart Rate Variability
- ❑ Autonomic Nervous System Analysis
- ❑ Physical/Mental Stress Assessment
- ❑ Chronic Fatigue & Electro-Cardiac Stability
- ❑ Overall Cardiovascular Health
- ❑ Aging of Blood Vessel & Circulation
- ❑ Elasticity of Artery & Peripheral (Arterial Stiffness)



► Symptoms of Autonomic Nerve System



- ❑ Functional disorder and lack of nutritional balance
- ❑ Hormone imbalances and intestinal lining function



- ❑ Feel chronic fatigue continuously
- ❑ Under depression, anxiety and mental stress



- ❑ Obesity and neurogenic stomach ache
- ❑ Diabetic mellitus, headache and migraine

► Symptoms of Arterial Circulation Disorder



- ❑ Numb feeling or cramp in extremity
- ❑ Peripheral blood circulation disorder
- ❑ Arteriosclerosis



Autonomic Nervous System Testing

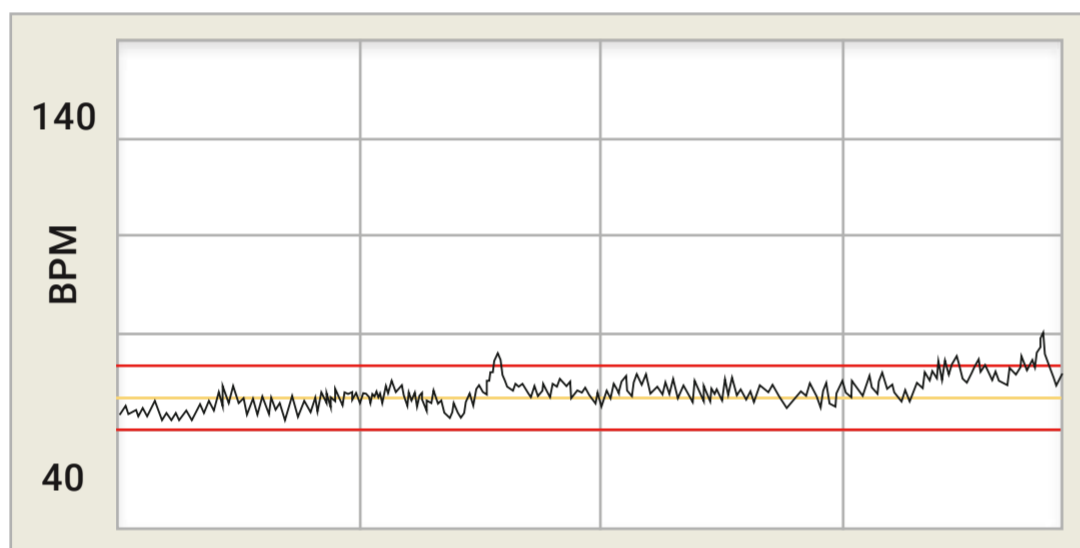
We Provide New Paradigm of Non-Invasive Diagnostics in 1 Minute Only!

► HRV(Heart Rate Variability)

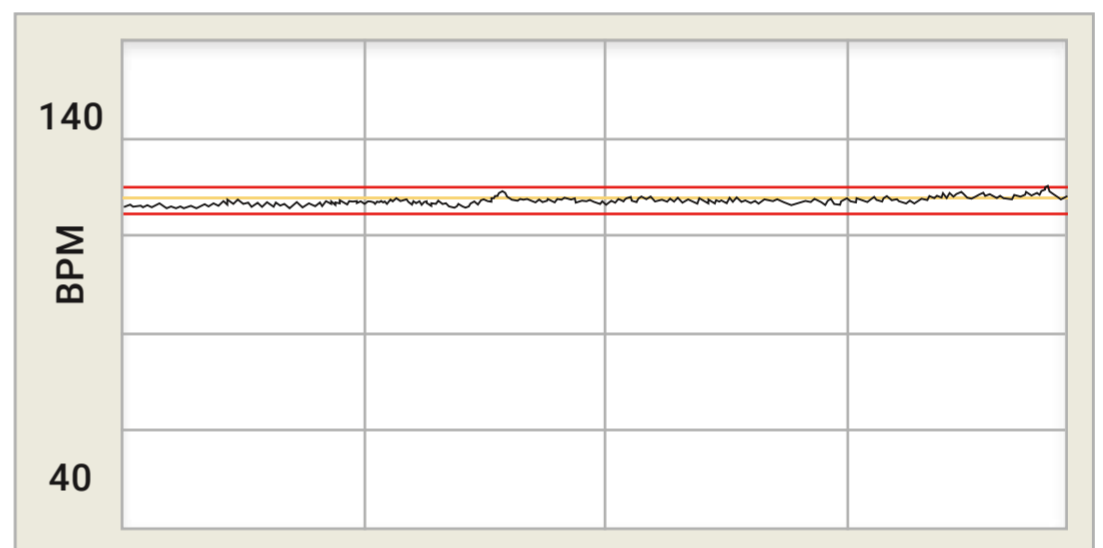
HRV is the physiological phenomenon of the variation in the time interval between consecutive heartbeats in milliseconds. HRV is regulated by the autonomic nervous system (ANS), and its sympathetic and parasympathetic branches, and it is commonly accepted as a non-invasive marker of ANS activity.

"Higher HRV has been found to be associated with reduced morbidity and mortality, and improved psychological well-being and quality of life."

► HRV Reflects Autonomic Nervous System



Healthy HRV

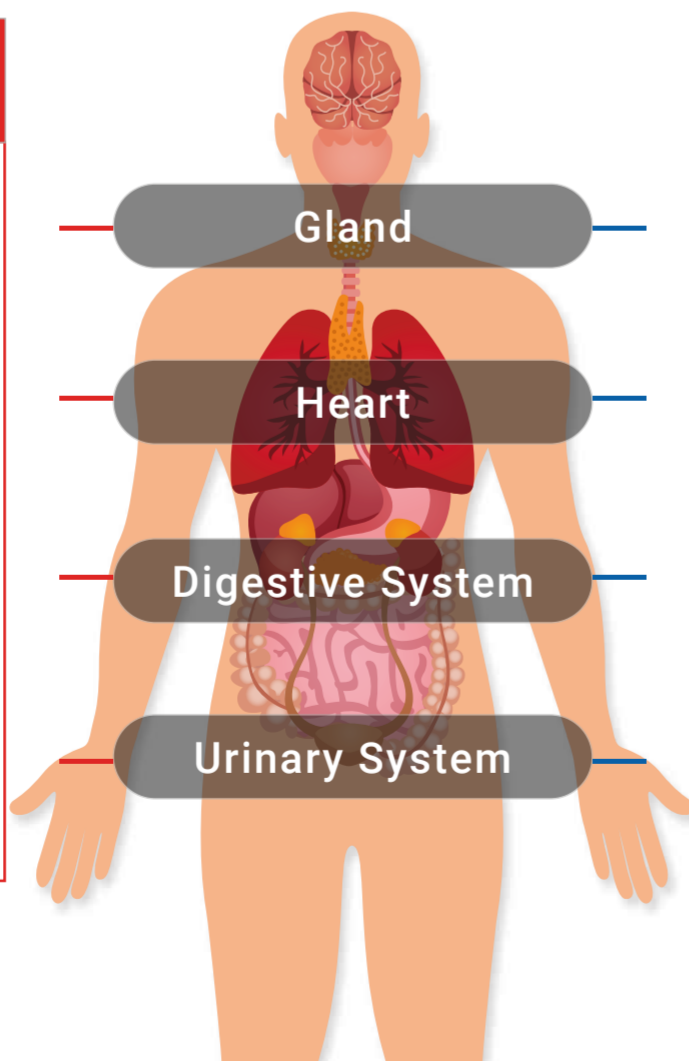


Unhealthy HRV

Autonomic Nervous System & Homeostasis

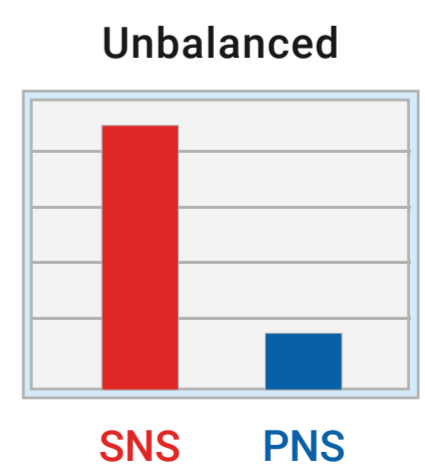
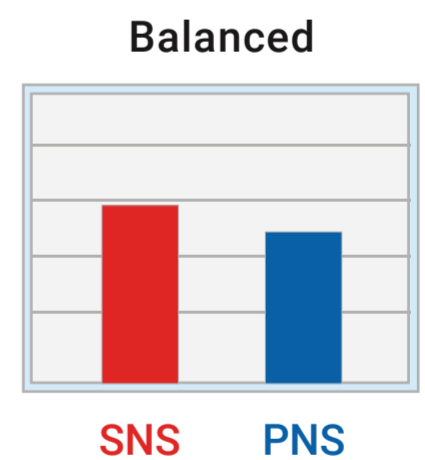
Sympathetic
[Fight or Flight]

- Inhibits Salivation
- Increases Heart Rate
- Inhibits Digestion
- Relaxes Bladder



Parasympathetic
[Rest or Recover]

- Stimulates Salivation
- Decreases Heart Rate
- Stimulates Digestion
- Contracts Bladder



HRV is the Most Reliable Index & Window to the Autonomic Nervous System!

How Old Is Your Artery?

Accelerated Photoplethysmography

APG (Accelerated Photoplethysmography) : APG is a non-invasive technique for measuring the amount of blood flow present or passing through, an organ or other part of the body.

Using a finger clip, the blood's pulse wave is followed from the time it leaves the heart and travels through the blood vessels down to the finger.

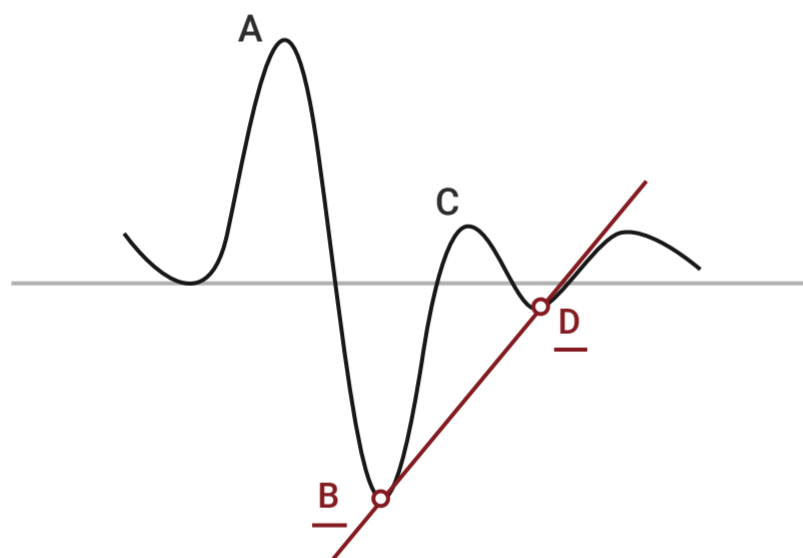
It is used to diagnose deep vein thrombosis & arterial occlusive disease. And, it has been applied for over 25 years and are currently being used in many clinical applications.

The APG waveform is a snapshot into the cardiovascular system and evaluates arterial elasticity (arterial stiffness), which is related to atherosclerosis.

▶ APG Test Analyzes

- ▣ Accelerated Plethysmography Analysis
- ▣ Aging of Blood Vessel & Blood Circulation
- ▣ 1~7 Type of Wave Patterns by Vascular Aging
- ▣ Arterial Elasticity (Arterial Stiffness)
- ▣ Peripheral Elasticity

▶ APG Waveform Analysis



A : Basic point to evaluate APG waveform

B : Arterial Elasticity

C : Reference Value to evaluate B & D

D : Peripheral Elasticity

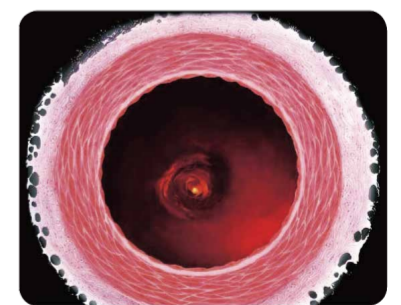
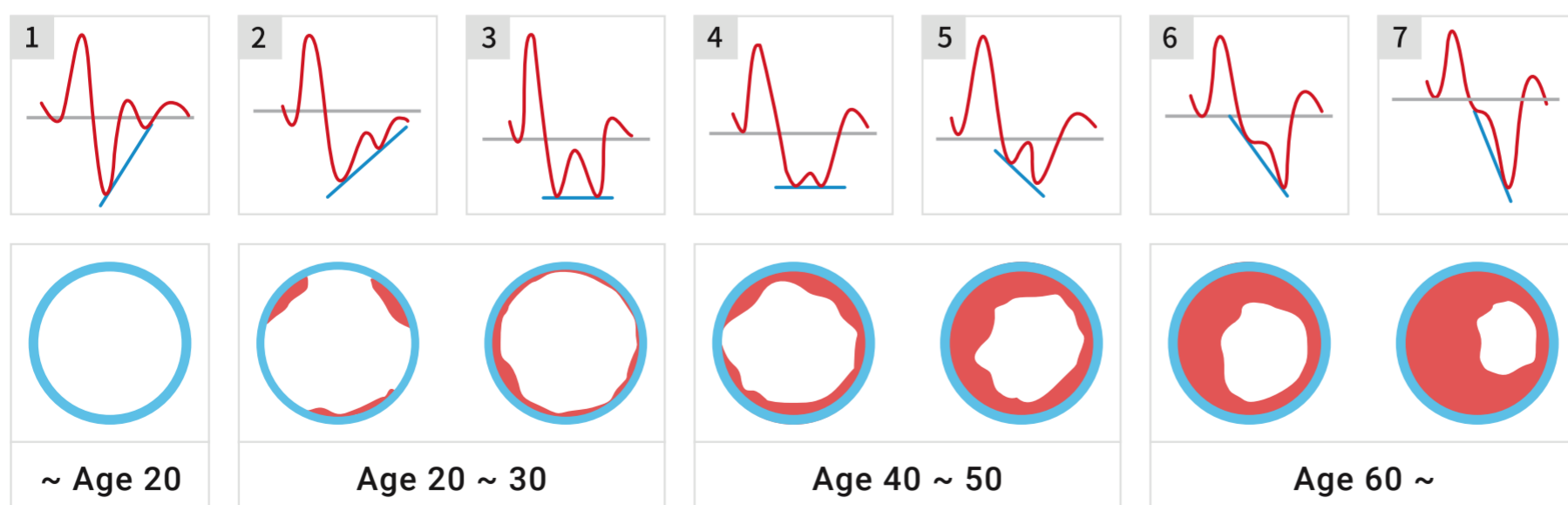
▣ **The gradient of B & D point**

- Overall vascular condition & aging

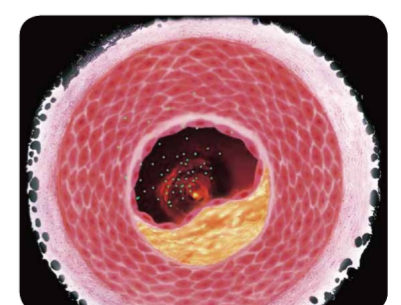
- Used to determine the type of waveform

▶ APG Wave Types By Vascular Aging

APG pattern (Types of pulse waveform correlated with arterial status)



Healthy Artery



Abnormal Artery With Arteriosclerosis

Excellent

Aging process of blood vessel

Very Poor

Why Should You Use Max Pulse?

Most Reliable Device to Detect Cardiovascular Diseases

✔ Usability



- ▣ Simple, User-friendly, Non-invasive (FDA Class 2)
- ▣ Widely applicable from Pediatric to Adult
- ▣ Easily adaptable towards general and specific requirements of almost all medical branches
- ▣ Presents a quick and reliable supplementary assessment of basic health risk factors

✔ High-Technology & Reliability



- ▣ World-Top Class HRV & APG Analysis Technology
- ▣ Provide both Asian & Western Clinical Reference in the world only
- ▣ International medical certificates(CE, FDA, CFDA, MHLW)

✔ Medical Background



- ▣ Researches for over 20 years internationally
- ▣ Acquired Patents of ANS & APG Analysis in Japan & Korea
- ▣ Development on the basis of more than 200 clinical papers including SCI Level

▶ Applicable Markets

- ▣ Clinics for Cardiovascular Disease Diagnosis
- ▣ Functional Medicine with the Nutritional Supplements
- ▣ General Practitioners and physicians
- ▣ Stress Release Center (Yoga, Meditation)
- ▣ Public Offices or Public Service Centers
- ▣ Health check-up as a pre-screening overall health
- ▣ Dietary Supplements with the pre/post therapy

▶ Components



Main Module



Software



PPG Probe



RS232 Cable



MP-100 Sensor
[Optional]

Specification

Features	<ol style="list-style-type: none"> 1. Heart Rate Variability Analysis 2. Autonomic Nervous System Assessment 3. Pulse Wave, Accelerated Photoplethysmography 		
Display Parameters	<ul style="list-style-type: none"> - HRV (Mean HR, TP, VLF, LF, HF) - ANS (The Balance of SNS & PNS, ANS Activity, Fatigue Index, Electro-Cardiac Stability, Stress Score, Physical/Mental Stress, Stress Resilience) - Pulse Wave, Accelerated Photoplethysmography - Type of Blood Vessel & Aging - Arterial Elasticity & Peripheral Elasticity 		
H/W Spec.	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> <ol style="list-style-type: none"> 1. Power <ul style="list-style-type: none"> - 100~220V, 50/60Hz, 0.4A 2. Size (W x D x H) <ul style="list-style-type: none"> - 150mm x 130mm x 35mm </td> <td style="width: 50%;"> <ol style="list-style-type: none"> 3. Weight <ul style="list-style-type: none"> - About 650g 4. Support O/S <ul style="list-style-type: none"> - Win7/32bit and above </td> </tr> </table>	<ol style="list-style-type: none"> 1. Power <ul style="list-style-type: none"> - 100~220V, 50/60Hz, 0.4A 2. Size (W x D x H) <ul style="list-style-type: none"> - 150mm x 130mm x 35mm 	<ol style="list-style-type: none"> 3. Weight <ul style="list-style-type: none"> - About 650g 4. Support O/S <ul style="list-style-type: none"> - Win7/32bit and above
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Performance	<p>PPG</p> <ul style="list-style-type: none"> - Measurement range: 30 ~ 200BPM - Accuracy: $\pm 2\%$ - Wave-out time: 2sec 		
Certificates	<div style="display: flex; justify-content: space-around; align-items: center;">      </div>		

MEDICORE

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