DETA ELIS
HOLDING

DePuls+
Software

User manual

Edition 1

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1. Introduction

Express Test Complex DePuls+ is a software used for assessment of the human body self-regulation resources. The program is implemented based on a DePuls+ device. The device is characterized by easy operation. It does not require any special skills. Thanks to the software interface, you can quickly obtain the test results in the suitable form.

DePuls+ device is efficient for control of the body condition when various methods of health improvement are used, i.e. biologically active supplement, bioresonance effect, health-improving massage, yoga, various spiritual practices, etc.

The test results are not a diagnostic decision and do not replace standard methods of disease diagnostics and consultations of specialized doctors. They serve as a helpful supplement for assessment of the body self-regulation resources.

2. Software features

• Real-time registration of heart rhythm

• Determination of user's biological age

• Assessment of general energetic condition of the body – "aura"

• Simultaneous representation of results of two tests for comparative analysis

• Printing of test results

3. Preparation for work

3.1. Registration Module connection

Connect the registration module according to paragraph 3 of the DePuls+ Operation Manual.

3.2. Software installation

1. Switch the PC on.

Warning. Prior to the first SW installation it is strongly recommended to connect the RM to the PC, otherwise the driver could not be installed automatically, and it would be necessary to install it separately.

2. Connect the software medium to the PC USB port.

3. Open the "My Computer" window, left-click the USB medium icon twice.

4. Start execution of DePuls+.exe file in the opened window, by double left-clicking. DePuls+ SW Installation Wizard will start running.

5. To install the DePuls+ SW with default settings, press the "Next" button in the successively opening windows of the Installation Wizard, and then the "Install" button in the Installation Wizard "All Ready for Installation".

6. Having finished the DePuls+ software installation, press the "Finish" button to close the Installation Wizard.

3.3. First start of software

After the first software start and the device connection to the PC, the operating system can display the warning message that the Windows firewall blocked some network features of the DEHolding Device Driver program (fig. 1)

It is necessary to permit the DEHolding Device Driver program to establish network connection both in private and public networks. For this purpose, select the check boxes "Private networks" and "Public networks", and then press the "Allow access" button. It will not make any user's data to be transferred into the network. The DEHolding Device Driver program is a part of the device driver and transmits the test signal to the DePuls+ SW trough a virtual local network only inside the PC.

In some cases the Windows firewall may not display the warning message and lock out the network features of the DEHolding Device Driver program immediately. Besides, the DePuls+ software will see the device correctly, but when you try to start the test, the test signal will not occur. To solve this problem, open the OS "Control Panel", select the "Windows Firewall" item and select "Allow a program of feature through Windows Firewall" in the opened setting window (Fig. 2).

Then press the button "Allow another program ...", select the DEHolding Device Driver program file in the opened file explorer window (by default, it is found as follows:

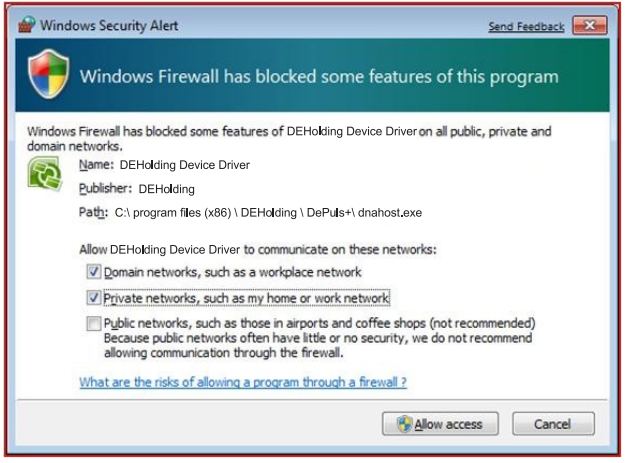

Windows Security Alert
Send Feedback
Windows Firewall has blocked some features of this program
Windows Firewall has blocked some features of DEHolding Device Driver on all public, private and domain networks.
Name: DEHolding Device Driver
Publisher: DEHolding
Path: C:\ program files (x86) \ DEHolding \ DePuls+\ dnahost.exe
Allow DEHolding Device Driver to communicate on these networks:
Domain networks, such as a workplace network
Private networks, such as my home or work network
Public networks, such as those in airports and coffee shops (not recommended) Because public networks often have little or no security, we do not recommend allowing communication through the firewall.
What are the risks of allowing a program through a firewall ?
Allow access
Cancel

fig. 1

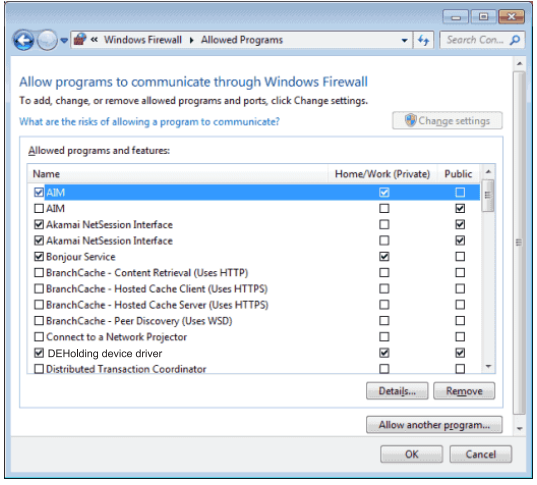

Windows Firewall ▸ Allowed Programs
Search Con...
Allow programs to communicate through Windows Firewall
To add, change, or remove allowed programs and ports, click Change settings.
What are the risks of allowing a program to communicate?
Change settings
Allowed programs and features:
Name
Home/Work (Private)
Public
AIM
AIM
Akamai NetSession Interface
Akamai NetSession Interface
Bonjour Service
BranchCache - Content Retrieval (Uses HTTP)
BranchCache - Hosted Cache Client (Uses HTTPS)
BranchCache - Hosted Cache Server (Uses HTTPS)
BranchCache - Peer Discovery (Uses WSD)
Connect to a Network Projector
DEHolding device driver
Distributed Transaction Coordinator
Details...
Remove
Allow another program...
OK
Cancel

fig. 2

"C:\Program Files (x86)\DEHolding\Onix\dnahost.exe", and, when the line "DEHolding Device Driver" will appear in the "Allowed programs and components" table, check tree boxes – next to "DEHolding Device Driver", in the "Home or work network" column and in the "Public networks" column. Then, close the firewall setting window, clicking "OK".

In case, when any other firewall is installed on the user's PC, it is necessary to set it so that it will not lock out the DEHolding Device Driver network features. The corresponding instructions are provided in the operation manual for this firewall.

Warning. For more detailed information on possible faults and troubleshooting please refer to the paragraph 6. – "Troubleshooting".

3.4. Connection of the DePuls+ Registration Module to the user

The electrodes are placed on the user's arms in the wrist area, with the contact pad being on the internal side.

The electrode with the red plug is put on the right arm, with the black plug – on the left one.

It is recommended to moisture the skin in the contact area with plenty of water.

During the test procedure, the user must be motionless, in sitting or in prone position.

In some cases, if the test signal wave has a very low amplitude, the electrode with the red plug is put on the right wrist, and the electrode with the black plug is put on the left ankle, also moistured with plenty of water.

To reduce interference during the measurement procedure, observe the following:

1. The user's hands must be motionless and relaxed. When the user is in sitting position, the hands are placed on the knees, and in the prone position - along the body.

2. Other people are not allowed within 1.5-2 meters area close to the user.

3. During the test process, maximum comfort must be provided for the user and her or she must be relaxed. It is not recommended to talk with the user or show the PC screen with the registered test signal. You can advise the user to close his or her eyes.

Warning. For more detailed information on possible faults and troubleshooting please refer to the paragraph 6. – "Troubleshooting".

4. Program interface

The program window (fig. 3) is provisionally divided into two parts: a list of users (Name) and the results of user's testing (History).

4.1 User list

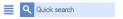
The user list is located in the left part of the window. The upper part is used for display and change of personal information of the selected user. The personal information can be displayed both in a minimized, shortened way and in an expanded way, when it can be changed. To switch between these two views, left-click on the line under the user's personal information  .

The user list contains information on all tested users. This part of window also comprises the user list control elements:

– Buttons for selection of the list display method:



– Field for quick search of users:



– Buttons for addition or deletion of users:



4.2. Test results

The right part of the window contains the block for displaying of the test results for the current user (fig.4). This block is a set of several tabs. Buttons for switching between them are provided in the upper part of the block:

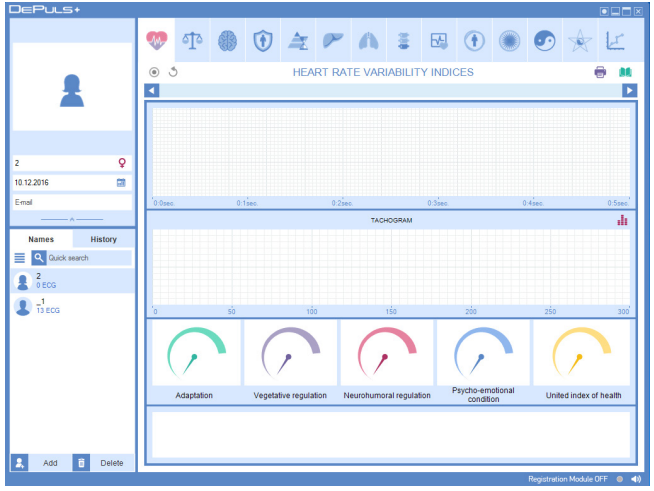


fig. 3



fig. 4

Brief description of the tabs:

Tab "Heart rhythm variability indicators Heart rate variability indices " has control elements for registration and display of the user's condition.

Tab "Vegetative regulation index" is used for display of a stress index and vegetative balance.

Tab "Psychoemotional state" is used for display of information of the user's psychoemotional state parameters.

Tab "Protective abilities of organism" shows the immune system state.

Tab "Rate of biological ageing" shows the biological age and energy potential.

Tab "Functional condition of digestive system" is used for display of the gastrointestinal tract organ condition.

Tab "Functional condition of organ systems" is used for display of the state of organs, systems and internal secretion glands.

Tab "Spine functional condition" is used for assessment of the musculo-skeletal system state.

Tab "Functional testing parameters" is used for the comparative analysis of tests of the same user.

Tab "Aura character" is used for display of the user's aura condition assessment.

Tab “Chakra system” is used for display of the user’s chakra state.

Tab “Meridian diagram” is used for display of assessment of the user’s meridian condition.

Tab “U-sin system” is used for display of the body state assessment, depending on the Yin-Yang energy harmony.

Tab “Dynamics of functional energy indicators” is used for a comparative analysis of the previous tests of the same user.

Tab “Recommendations” is used for display of the required health improvement scheme. Information on the connected device is shown in the lower right corner of the program.

Registration Module ON

The number of tests, carried out by means of this device, is shown within the brackets. The indicator colour shows the device operation condition:

gray – the device is not detected;

red – the device from another hardware-software package is connected, it is not designed to work with DePuls+ complex;

green – the device is ready for operation.

Button / is used for switching the program sound signals on and off.

4.3. “Heart rate variability indices” tab (fig. 5)

The tab contains control elements, used for registration and display of the user’s test signal.

Brief description of the control elements:

/ – button for start/finish of the test signal registration.

/ – button for change of polarity of the registered test signal.

24 March 2015 12 : 02 : 31 – control element for displaying the results of one of the previous tests of the given user.

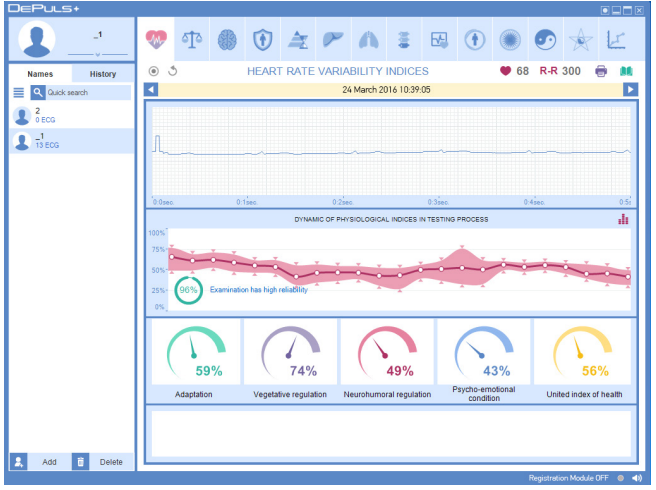


fig. 5

Test signal

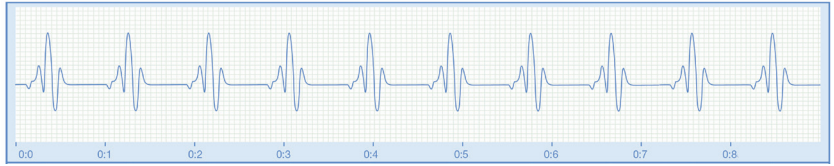


fig. 6

To select the test results, use buttons ◀ and ▶ which enable selection of the earlier or later date of test, respectively. Besides, left-clicking on the date in this element opens the test selection menu, where you can choose the results of one of the previous tests.

68 – heartbeat rate.

R-R 296 – the number of registered heart rates.

Depending on the program operation mode, either previously registered test signal (fig. 6) or currently registered test signal is displayed. The horizontal axis shows the time from the registration procedure start in minutes and seconds, and the vertical axis demonstrates the signal amplitude. The diagram scaling is performed by the mouse movement, with the right button being pressed. The diagram shift is performed by the mouse movement, with the left button being pressed.

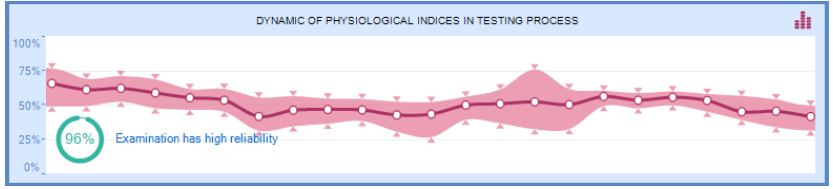


fig. 7

Dynamics of physiological parameters during the test procedure

This diagram enables evaluation of the registered test signal quality. If its value greatly altered during the test process, it means that the user was not at complete rest. A percentage ratio, displayed in the lower or upper corner of this window, also demonstrates the degree of test reliability.

Such registration is considered to be unreliable, and the conclusions, made on the basis of this registration, may not reflect the actual condition of the given user.

Rhythmogram (fig. 8)

Depending on the operation mode, the software displays either previously or currently registered user's rhythmogram. The rhythmogram is a diagram which shows RR number on the horizontal axis and duration of RR interval in seconds on the vertical axis. The RR interval is the time period between two consequent heart beats. Artifacts – heart beat disorder or interferences – are shown by pink colour on the rhythmogram. The diagram scaling is performed by

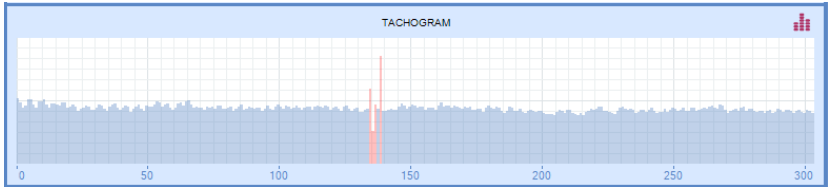


fig. 8

the left right mouse button and the diagram shift – by the left button.

- The button is used for displaying of the diagram of the dynamics of physiological parameters during the test procedure.

Functional condition indicators

The indicators show rated values of functional condition parameters:

"A" – the body adaptation level

"B" – vegetative regulation indicator

"C" – neurohumoral regulation indicator

"D" – psychoemotional state indicator

"Health" – combined health condition indicator

Field for remarks to tests.

It is used for saving and change of text remarks to the given test procedure.

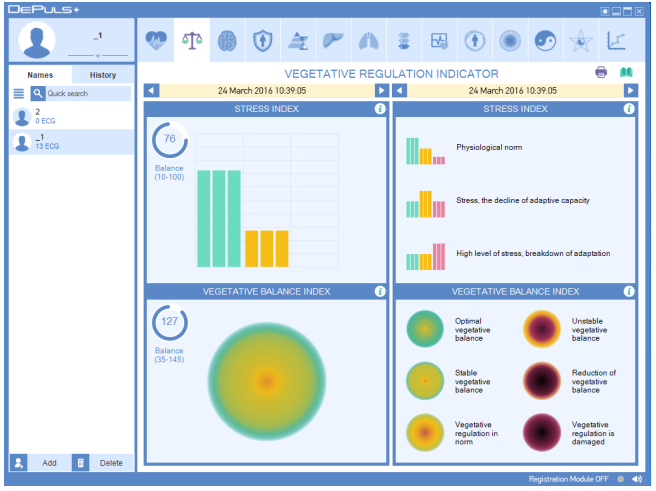


fig. 9



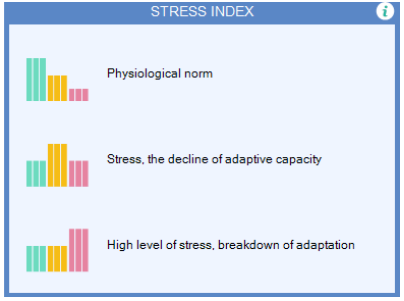
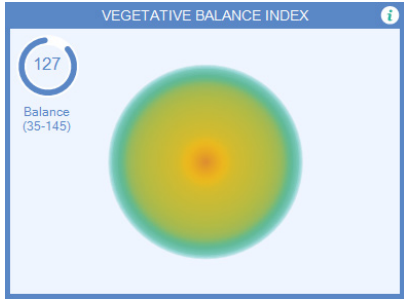


fig. 10

4.4. "Vegetative regulation indix" tab (Fig. 9)

Stress index (fig. 10) shows the level of stress load, leading to impairment of adaptation resources and self-regulation processes. When the stress index exceeds the limit of 800-1000 U, the conditions, stipulating the risk of various diseases, arise. A significant decrease in immunity is also observed.

Vegetative balance index (VBI) (fig. 11) characterizes the relation between activity of the sympathetic and parasympathetic parts of the vegetative nervous system (VNS).



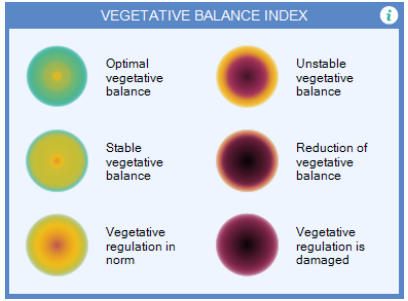


fig. 11

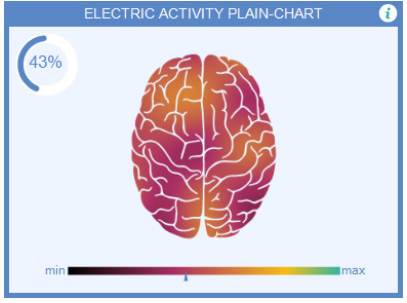
The VBI value increases, when the sympathetic VNS part is mobilized, and decreases, when the parasympathetic VNS is strengthened.

The vegetative (autonomous) nervous system controls performance of all internal organs. The sympathetic and parasympathetic parts, producing directly contrary effect on various organs and systems, are an important part of the VNS. Depending on the body state, the vegetative balance tends to one or another side.

The sympathetic part dominates, when hard work is performed and in case of psychological stress, and the parasympathetic one prevails at rest.



fig. 12



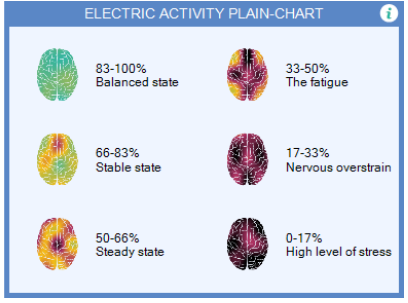
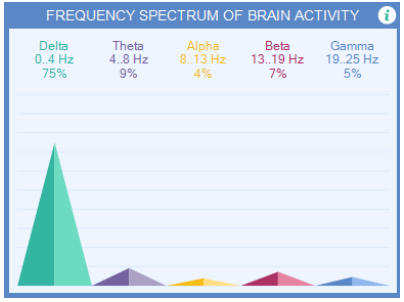


fig. 13

4.5. "Psychoemotional state" tab

The "Psychoemotional state" tab (fig. 12) shows the information on the user's psychoemotional state parameters. Spline map (fig. 13) is a result of spline interpolation of amplitudes of the main brain rhythms.

Spline maps of electrical activity are a set of two-dimensional distributions of the central nervous system (CNS) in the brain functional spaces and characterized the CNS integral activity within these spaces.



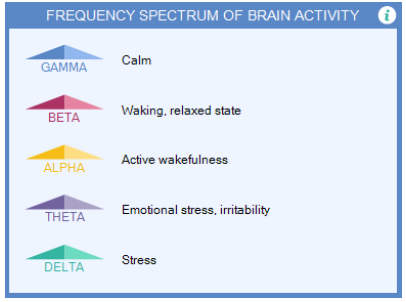


fig. 14

The areas with yellow-red and red-violet colour range indicate the reduced brain activity caused by excessive fatigue and stress

The psychoemotional state indicator characterizes the level of the stress destructive impact on the body.

The brain activity frequency indicator (fig. 14) is calculated by transposing of the heart rhythms into the brain rhythm frequency range. The obtained spectrum is divided into ranges, corresponding delta, teta, alpha, beta and gamma rhythm frequencies. Predominance of the delta rhythm indicates the excessive fatigue and stress.

4.6. "Protective abilities of organism" tab (fig. 15)

The immunity level indicator (Fig. 15) shows the body immunity status, demonstrating the ability to adapt to new conditions. The indicator is a solution of Mandelbrot's equation with dynamic test signal parameters.

The immunity level indicator shows the body energy resources. A partial parameter disharmony means that there are functional disturbance and presence of any pathogenic flora in the body. The lower the immunity lever percent is, the higher is the possibility of protection power reduction due to a large parasitic load or stress.

4.7. "Rate of biological ageing" tab (fig. 16)

Gerontological curve (fig. 17) is the slowest biological rhythm of the body. Its period is determined by the longevity and accounts for 90-110 years. The curve reflects relations between the speed of vital resource accumulation by the body and speed of consumption of these resources, and represents a combination of logarithmic and exponential curves. For the reference gerontological curve, these relations correspond the "golden section" parameters. A conditional "point", when the vital resource accumulation changes into the process of slow consumption, is determined by an empirical way and is approximately 30-33 calendar years.

The calendar year is measured by the clock, existing outside the body, while the biological age is determined by the clock within the body. People can be younger or older than their age, therefore, disease and death, associated with ageing, occur at different calendar ages. The reason for this difference is mainly of genetical origin. Consequently, the human true age is determined not by the time, elapsed from birth, but by the indicators, reflecting his or her vitality. It is the body vitality degree that is determined as the biological

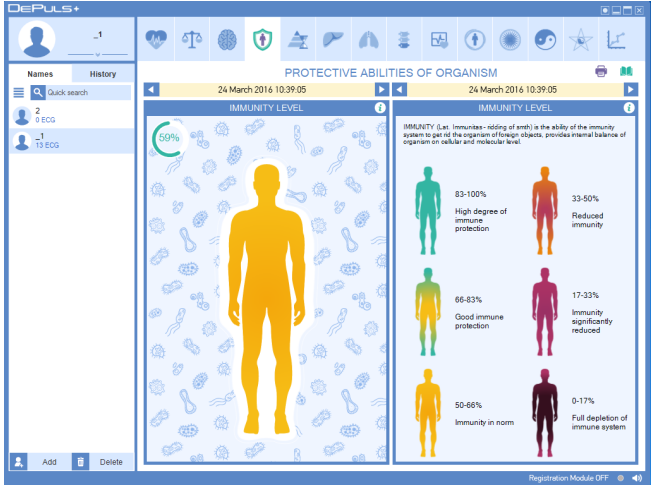
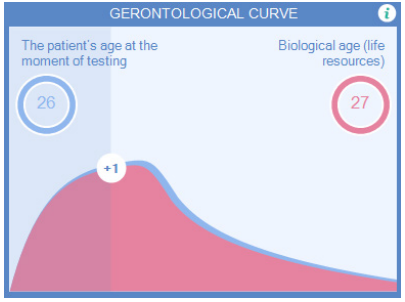

DePuls+
Names
History
Quick search
Add
Delete
PROTECTIVE ABILITIES OF ORGANISM
24 March 2016 10:39:05
IMMUNITY LEVEL
59%
IMMUNITY (Lat. Immunitas - ridding of smth) is the ability of the immunity system to get rid the organism of foreign objects, provides internal balance of organism on cellular and molecular level.
83-100%
High degree of immune protection
33-50%
Reduced immunity
66-83%
Good immune protection
17-33%
Immunity significantly reduced
50-66%
Immunity in norm
0-17%
Full depletion of immune system
Registration Module OFF

fig. 15


DePuls+
Names
History
Quick search
Add
Delete
SPEED OF BIOLOGICAL AGEING
24 March 2016 10:39:05
GERONTOLOGICAL CURVE
The patient's age at the moment of testing
26
Biological age (life resources)
27
+1
Biological age less than calendar age
Biological age more than calendar age
ENERGY PYRAMID
Energy accumulation
86
167
(150-600)
Energy spending
81
Optimal energy balance
Reduced energy resources
High energy resources
Low energy resources
Energy resources in norm
Energy balance is damaged
Registration Module OFF

fig. 16



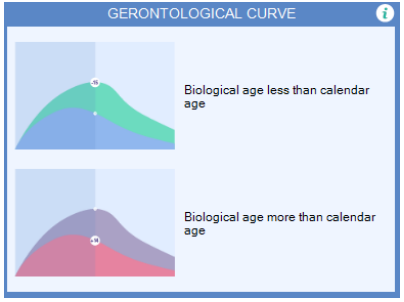
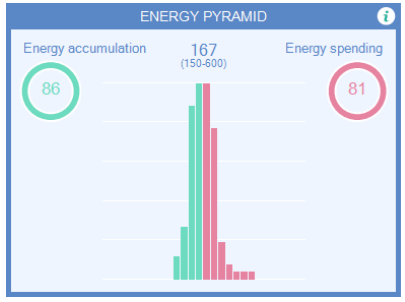


fig. 17

age. The biological age is the measure of system disintegration of the body during ageing.

Using the "gerontological curve" notion, we can determine the biological or true age of the man which, as a rule, is not the same as the calendar age – to the worse or better extent. The reference gerontological curve is obtained by a statistical analysis of biorhythms of more than 10000 clients from various age groups. It is used as a graphical expression of the speed of accumulation and consumption of vital resources in



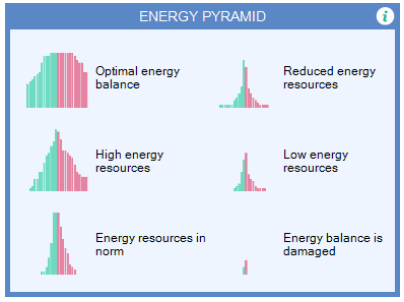


fig. 18

the body of an average human and corresponds the life cycle with 100 calendar year duration.

The integrated health index is proportional to the vital resource volume. Marking this indicator on the ordinate axis and projecting it on the reference gerontological curve, we obtain the biological age point of the client. Projection of this point on the horizontal axis is the biological age in the calendar measurement we got used to. Energetic pyramid (fig. 18) characterizes the total volume of the body physiological resources and balance between the cycles of consumption and

recovery of these resources during the existing life rhythm. The relation between the areas of the left and right pyramid parts characterizes the dynamics of anabolic and catabolic processes in the body.

The volume of the left part of the pyramid is proportional to the resource restoration time, while the volume of the right part is proportional to the resource consumption time The minimum volume of the entire pyramid signalizes about the body physiological resource depletion.

4.8. “Functional condition of digestive system” tab (fig. 19)

The screen displays the information on the condition of the gastrointestinal tract organs as an animation of the man’s body silhouette with organs, changing their colour, depending on their state. Silhouettes of separate organs around the man are also displayed, with the colour depending on their condition.

button is used to display help information.

4.9. “Functional condition of organ systems” tab (fig. 20)

The screen displays the information on the state of such organs as heart, vessels, kidneys, urinary bladder, lymphatic vessels, lungs, trachea, nervous and endocrine system, reproductive organs. The picture is presented as a silhouette with organs, changing their colour, depending on their state. Silhouettes of separate organs around the man are also displayed, with the colour depending on their condition.

button is used to display help information.

4.10. “Spine functional condition” tab (fig. 21)

The “Spine functional condition» tab shows the information on the state of 5 regions of the user’s spine. The regions are displayed as a spine silhouette and the colour of every region depends on the state at the testing time. Additional information on functional changes is shown to the on the right side

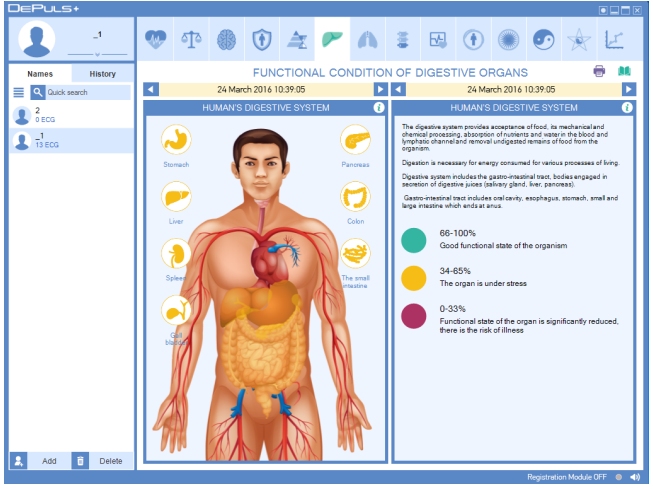


fig. 19

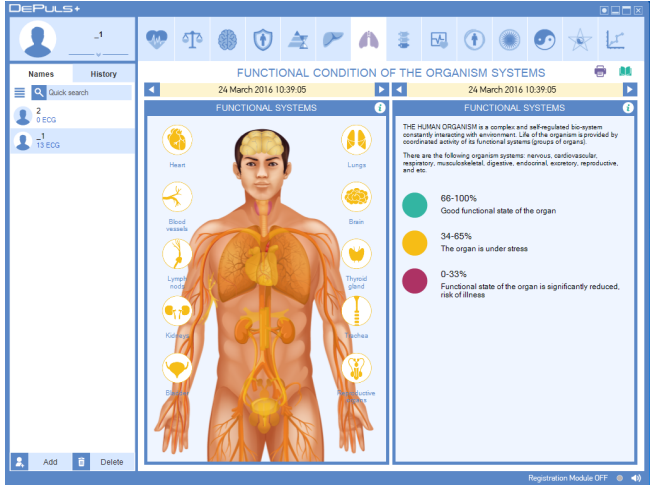

DePuls+
Names
History
Quick search
2
0 ECG
_1
13 ECG
Add
Delete
FUNCTIONAL CONDITION OF THE ORGANISM SYSTEMS
24 March 2016 10:39:05
FUNCTIONAL SYSTEMS
Heart
Lungs
Blood vessels
Brain
Lymph nodes
Thyroid gland
Kidneys
Trachea
Bladder
Reproductive system
FUNCTIONAL SYSTEMS
THE HUMAN ORGANISM is a complex and self-regulated bio-system constantly interacting with environment. Life of the organism is provided by coordinated activity of its functional systems (groups of organs).
There are the following organism systems: nervous, cardiovascular, respiratory, musculoskeletal, digestive, endocrinal, excretory, reproductive, and etc.
66-100%
Good functional state of the organ
34-65%
The organ is under stress
0-33%
Functional state of the organ is significantly reduced, risk of illness
Registration Module OFF

fig. 20

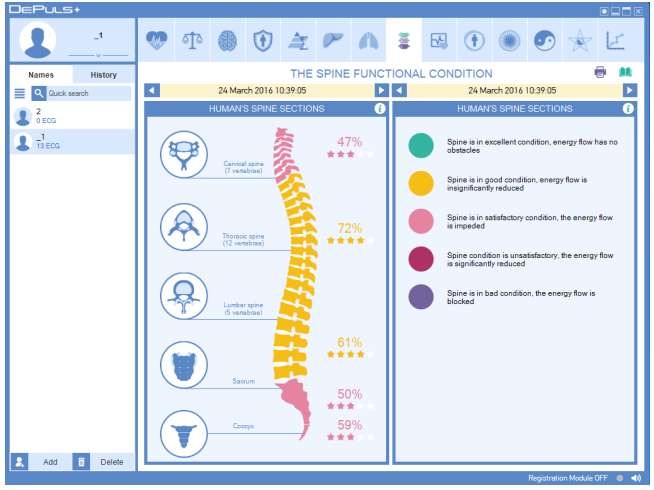

DePuls+
Names
History
Quick search
2
0 ECG
_1
13 ECG
Add
Delete
THE SPINE FUNCTIONAL CONDITION
24 March 2016 10:39:05
HUMAN'S SPINE SECTIONS
Cervical spine (7 vertebrae)
47%
Thoracic spine (12 vertebrae)
72%
Lumbar spine (5 vertebrae)
61%
Sacrum
50%
Coccyx
59%
HUMAN'S SPINE SECTIONS
Spine is in excellent condition, energy flow has no obstacles
Spine is in good condition, energy flow is insignificantly reduced
Spine is in satisfactory condition, the energy flow is impeded
Spine condition is unsatisfactory, the energy flow is significantly reduced
Spine is in bad condition, the energy flow is blocked
Registration Module OFF

fig. 21

of the silhouette and is provisionally evaluated by the amount of stars – from 0 (the worst condition) to 5 (the best condition) and in percentage rating.

4.11. “Functional testing parameters” tab (fig. 22)

The “Functional testing parameters” tab shows the changes of functional state parameters over time.

The upper part of the tab comprises two date management elements which can be used for selection of the period under analysis. Maximum ten last tests are analyzed by default.

The results of all analyzed tests are displayed on diagram “Dynamics of functional condition parameters”.

A B C D H ♥ buttons in the upper right part of the diagram are used to hide or display the corresponding parameter on the diagram.

Use the left mouse button to select one of the tests on the diagram in order to display more detailed information. The currently selected test is marked by a yellow vertical line.

The information on the currently selected test is displayed under the diagram.

The values of functional condition parameters show the information on the client's functional state. They are organized under a single principle and differ only in the displayed information.

The “Daily prognosis” diagram allows evaluation of the user's general condition throughout a day. This prognosis is calculated on the basis on values of the user's physiological indicators over the last month, starting from the last test date, shown on the “Dynamics of functional condition parameters” diagram.

The “gerontological curve” shows the user's “biological age” and compares it with the calendar age.



fig. 22

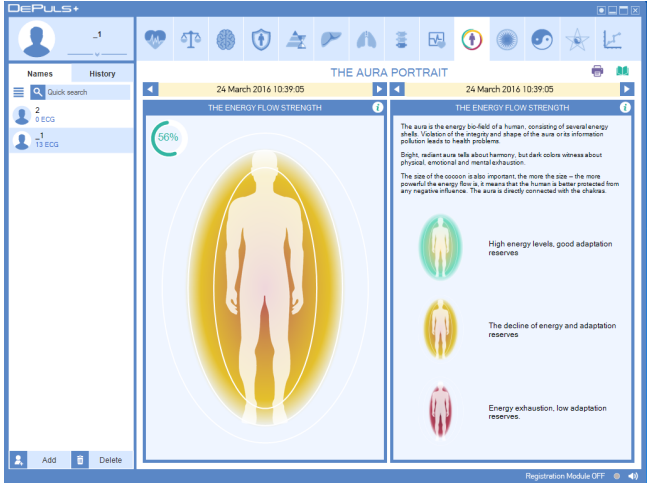


fig. 23

4.12. “Aura character” tab (fig. 23)

The “Aura character” tab displays the information on the user’s aura. The user’s aura is shown as an animation of man’s silhouette, and the aura colour depends on its general condition. The aura relative power is displayed in the upper left corner as a circular diagram.

What is aura?

The human body is a peculiar generator of electromagnetic waves, and the quality and speed of energy release and absorption by the human body is determined by the quality and speed of chemical reactions at the cellular level. Speaking about the quality of energy exchange in the human body, the follower of natural philosophy use the notion of “aura”. From the scientific point of view, we cannot speak about any magical methods, that provide “taking photos” of the aura or registering it in some other way. However, the analysis of energetic processes inside the human organs, the processes, expressed as rhythm signals, lets us to create an integral indicator which will objectively reflect the quality of performance of the cardiovascular, nervous, endocrine and vegetative system. This indicator will be close to the aura notion with regard to its physical content, in the way how Eastern healers understood it.

4.13. “Chakra system” tab (fig. 24)

The “Chakra system” tab shows the information on the user’s chakra state. The user’s chakras are shown as an animation of man’s silhouette, and the degree of chakra opening is shown by the number of rings around it – 5 (opened), 0 (closed). The chakra relative power is displayed to the right from the silhouette and provisionally evaluated by the amount of stars – from 0 (the worst condition) to 5 (the best condition) and in percentage rating.

button is used to display the background information on chakras.

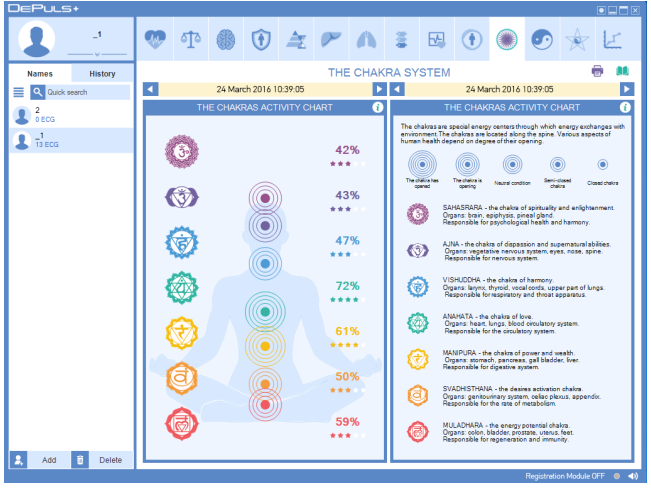


fig. 24

Chakra description

1. Muladhara – Main (root) chakra

Chakra position:

- In the area of perineum, in the point between the genitals and rectal orifice.



Hormonal glands, related to the chakra:

- Germ glands and suprarenal glands.

Body organs, related to the chakra:

- "Solid" body organs – spinal column, skeleton, bones, teeth and nails.
- Eliminative organs – rectal orifice, straight intestine intestinal tract.
- Intimate and reproductive organs – prostate and gonads, as well as blood and cellular structure.

Problems, arising due to imbalance in the chakra:

- Constipation haemorrhoids, fatigue, apathy, dullness, blood disease, back tension, joint and bone problems, tissue and skin problems.

2. Svadhisthana – Sexual chacra

Chakra position:

- In the pelvis area, between the pubic bones.



Hormonal glands, related to the chakra:

- Gonads – ovaries, testicles – prostatic gland and lymphatic system.

Body organs, related to the chakra:

- Pelvis, lymphatic system, kidneys, gall bladder, genitals and all body fluids (blood, lymph, digestive juices, seminal fluid).

Problems, arising due to imbalance in the chakra:

- Muscle spasms, allergies, physical fragility, constipation, sexual imbalance and absence of libido, infertility, disturbance and spleen, absence of creativity.

3. Manipura – Solar plexus chakra



Chakra position:

• Below the diaphragm, between the breastbone and omphalus.

Hormonal glands, related to the chakra:

• Pancreatic gland and suprarenal gland.

Body organs, related to the chakra:

• Respiratory system and diaphragm, digestive system, stomach, pancreatic gland, liver, spleen, gall bladder, small intestine, suprarenal gland, lower part of the back and sympathetic nervous system.

Problems, arising due to imbalance in the chakra:

• Mental and nervous exhaustion, reticence, communication problems, gallstones, diabetes, digestive system problems, ulcers, allergies, heart diseases.

4. Anahata – Heart chakra



Chakra position:

• Parallel to the heart, in the body centre.

Hormonal glands, related to the chakra:

• Thymus gland.

Body organs, related to the chakra:

• Heart, blood circulation system, lungs, immune system, thymus gland, upper part of the back, skin, hands.

Problems, arising due to imbalance in the chakra:

• Respiratory diseases, heartache, heart attacks, hypertension strain, anger, life displeasure, insomnia, fatigue.

5. Vishuddha – Throat chakra



Chakra position:

• Throat.

Hormonal glands, related to the chakra:

• Thyroid and parathyroid glands.

Body organs, related to the chakra:

• Throat, neck, vocal cords, thyroid gland, parathyroid gland, jaw, lung apex, ears, muscles, arms and nerves (this opinion is not supported by everyone).

Problems, arising due to imbalance in the chakra:

• Difficulty in expressionmutism, respiratory organ diseases, headaches, pain in neck, shoulder and back of the head, throat diseases, including infectious ones, vocal cord diseases, communication problems, low self-esteem, lack of creativity, ear infections, inflammatory processes and hearing problems.

6. Ajna – Third eye chakra



Chakra position:

• Forehead centre.

Hormonal glands, related to the chakra:

• Hypophysis and pineal gland.

Body organs, related to the chakra:

• Brain and all brain elements, central nervous system, face, eyes, ears, nose, sinuses.

Problems, arising due to imbalance in the chakra:

• Eye diseases, ear, respiratory system diseases, nose and sinus diseases, facial nerve diseases, headaches, nightmares.

7. Sahasrara – Crown chakra



Chakra position:

• Head top.

Body organs, related to the chakra:

• Brain.

4.14. “Meridian diagram” tab (fig. 25)

The “Meridian diagram” tab shows the information on the user’s meridian condition.

The screen displays the meridian diagram, with shape and colour depending on the state of the user’s meridians.

The screen also displays an assessment of ability of every meridian to accept and give energy during the meridian daily cycle. Besides, relative values of every meridian of the user are displayed.

button is used to display the background information on meridians.

According to the Eastern medicine, it is the human body energy meridians that plays the essential role in the process of health maintenance. The Eastern healers believe that all the processes in the human body are inseparably associated with the events in the Universe energetic shell.

Scientists proved long ago that all processes of information transfer in the body are electrical impulses that are generated and transferred by nervous cells. An excess of the produced energy is partially absorbed by internal organs and tissues, but the remaining energy must be removed. The Eastern healers found the place of energy release – biologically active points – by experiments. The chains of such places on the body form conditional lines – meridians. There are 12 main pairs, with each of them responsible for particular organ systems.

1. Lung meridian

It provides control of metabolism and breathing. Changes in the meridian energy influence the state of skin, hair and sweat glands. The meridian also controls larynx, tonsils, trachea and bronchi, that have interrelated functions.

2. Large intestine meridian

The main function is to remove waste products from the body. It forms the pair with the lung meridian and is in close relation with lungs.

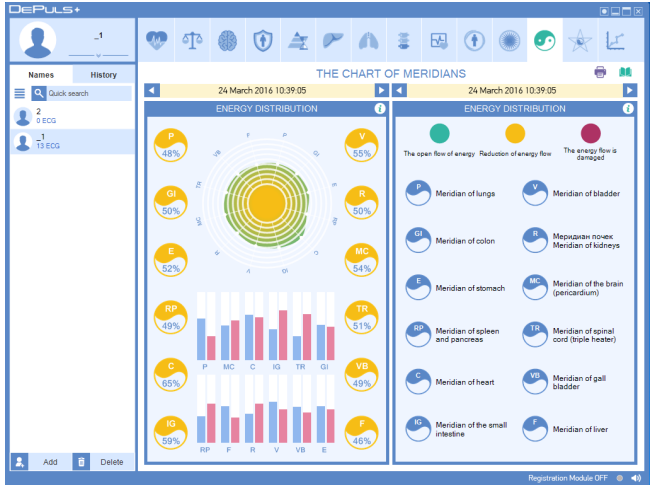


fig. 25

3. Stomach meridian

The main function is to accept and process food. Stomach and spleen are closely interrelated. The stomach as an organ is the centre of the human energy system, obtaining energy from food and distributing it over the entire body.

4. Spleen – pancreatic gland meridian

It controls food movement and digestion in the intestine, and is also responsible for absorbtion of nutritious substances into blood.

5. Heart meridian

It determines functional condition of heart and blood circulation system (vascular tone). The meridian also controls consciousness, mental activities, feelings and emotions.

6. Small intestine meridian

It accepts the food, digested in the stomach, and provides control of absorption of nutritional substances and fluids. The small intestine and heart meridians form the Yin-Yang pair.

7. Urinary bladder meridian

It regulates kidney performance and controls urination.

8. Kidney meridian

It is a storage for "essence" energy which determines energetic resources of the entire body. The kidney meridian contains nutritional substances that are the basis for activities of the internal organs and systems, and energy of kidneys themselves is the basis for growth, development and reproduction.

9. Pericardium meridian

The main function of the meridian is to protect heart and provide it with additional support in case of strong load.

10. Meridian of three heaters

The meridian is not associated with any particular organ. It is a whole system, consisting of three cavities, three functional units:

1) Upper cavity: corpus and chest to the diaphragm (respiratory and blood circulation systems).

2) Medium cavity: from the diaphragm to omphalus (digestive system, stomach, spleen).

3) Lower cavity: the area below the omphalus (kidneys, urinary bladder and urogenital system organs).

11. Gall bladder meridian

It is in close relation with the liver meridian. Their functional conditions are interrelated.

12. Liver meridian

The liver has an ability to reinforce the body functions. It plays a leading role in metabolism processes, being a "biochemical laboratory" of the body.

4.15. "U-sin system" tab (fig. 26)

The U-sin system tab displays the information on proportions of five main elements of the user.

According to Ayurveda, the human body consists of material and non-material components. The interrelation between the two parts determines the state of physical and mental state. One of the main Ayurveda principles is that neither components can function independently, the both parts operate only together and strictly synchronously. Imbalance or failure in synchronization of the material and non-material components cause diseases.

According to the Indian philosophy, the Universe and all its components, are composed of five material elements or substances: "wood", "fire", "water", "earth" and "metal". As per Ayurveda, all, even the smallest body components, contain these five elements.

In view of the contemporary science, the five elements are not interpreted literally. They have a meaning of particular properties of the substances which they form. Such generalizations provide better understanding of all constituent parts of the Universe.

Like everything in Ayurveda, the five elements are indissolubly tied. Being in constant motion, 5 elements mutually suppress each other, and every main element provides vitalization or generates the following element, existing thanks to the previous one. Wood generates fire and suppresses earth. Fire generates earth and suppresses metal. Earth generates metal

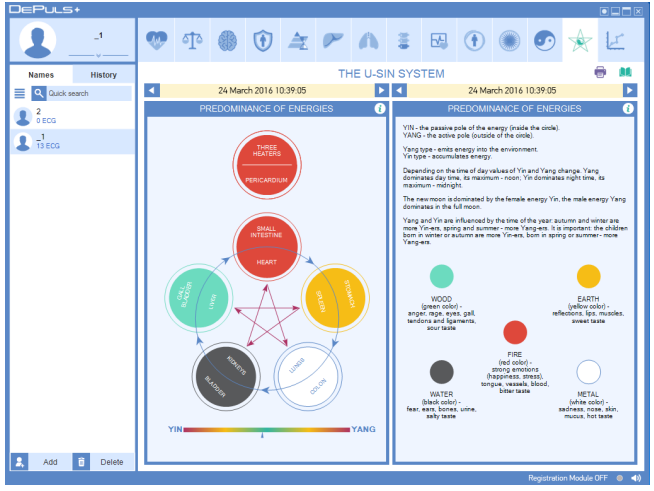


fig. 26

and suppresses water. Metal generates water and suppresses wood. Water generates wood and suppresses fire.

Each primary element has a corresponding energy of the particular power, colour, taste, season, time of day, planet, etc.

U-sin doctrine allowed classification of the surrounding world phenomena, dividing the continuous interrelation of Yin and Yang into different stages, suitable for observations and analysis.

To provide quicker increase of the energy level, it is necessary to know which energy type prevails in the given moment – Yin or Yang.

Yin is a passive energy pole, Yang is an active pole. The Yang type discharges the energy outside, while the Yin type accumulates energy.

The essence of Ayurveda methods consists in prevention of failures or restoration of disturbed synchronization and harmony of five material elements in the human body and Yin and Yang energies.

4.16. "Dynamics of functional energy indicators" tab (fig. 27)

The "Dynamics of functional energy indicators" tab can be used for comparison of a few previous tests for the same user. The upper part of the tab contains two elements for selection of the test date, which allows to choose the period for comparison. By means of the left element, you can choose the starting date of the displayed period, and the right one – to choose the final date.

The "Dynamics of functional energy indicators" diagram shows all tests, carried out within the selected period. You can choose one of the tests, left-clicking on it. The selected test will be highlighted by a yellow cursor, and the detailed report on this test will be displayed in the lower half of the "Dynamics" tab.

The "Aura", "Chakras" and "Meridians" diagrams show the values of corresponding physiological indicators for the currently selected test.



fig. 27

4.17. "Recommendations" tab (fig. 30)

The "Recommendations" tab shows the information on use of the most suitable health improvement scheme, including DeVita complexes and DeLixir within the framework of a complex approach to health improvement with DEHolding.

5. Program operation

5.1. Program startup

To start the program, move the cursor to the DePuls+ program icon on the desktop and left-click on it twice.

After the program is loaded, the program window will open on the screen:

The green indicator must light in the lower corner of the main window, it means that the device is ready for operation. The red "Power" LED of the registration module must light continuously.

Warning. Prior to the program start, make sure that the registration module is connected to the PC.

5.2. Addition of new user (fig. 29)

Press Add button. A new user will be added to the user list, with the personal information being unfilled. To ensure filling in of the personal information, the window for change of the selected user personal information will open in the upper part of the user list. It consists of three input fields: "User's photo", "Name" and "Date of birth".

Enter the user's name, surname and patronymic into the "Name" field and specify his or her sex. To do this, left-click on the male ♂ icon the "Name" field. One click leads to the male icon change into the female ♀ icon, the repeated click changes it into the male ♂ icon again.

Enter the date of birth of the added user into the "Date of birth". You can enter the date in numbered format ("DD.MM.YYYY"), both by means of calendar which appears, when you left-click on icon.


DePuls+
2
Names
History
Quick search
2
0 ECG
-1
13 ECG
Add
Delete
Recommendations for the integrated use of the DEHolding products
BIORESONANCE DEVITA DEVICES
DeVita ENERGY
Daily in the morning,
1-2 times a day
DeVita RITM Base
Auto-program — Healthy day,
Additional programs: Anti-Cold,
Free breath, No allergies.
Daily, during a month.
DeVita AP Base
1. Anti-Cold
2. Anti-Flu
3. Anti-Virus
4. Intimate health
5. No bacteria
6. No staphylococcus
7.No streptococcus
Daily, during 2-3 weeks
DAILY APPLICATION PLAN
MORNING
AFTERNOON
EVENING
NIGHT
FUNCTIONAL BEVERAGES DELIXIR
MULTI-ENERGY DeLixir
Recommended daily dose –
15 ml (1 dose)
pH BALANCE DeLixir
Recommended daily dose –
15 ml (1 dose)
DETOX DeLixir
Recommended daily dose –
15 ml (1 dose)
COLLAGEN+ DeLixir
Recommended daily dose –
15 ml (1 dose) before sleep
Registration Module OFF

fig. 28

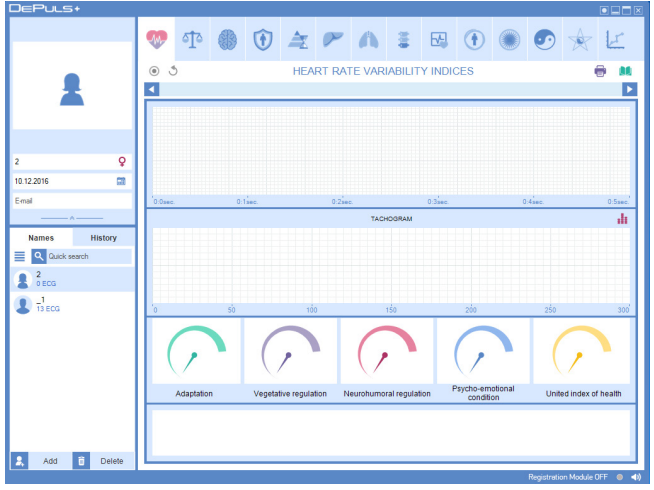

DePuls+
HEART RATE VARIABILITY INDICES
2
10.12.2016
E-mail
Names
History
Quick search
2
0 ECG
-1
13 ECG
Add
Delete
0.0sec.
0.1sec.
0.2sec.
0.3sec.
0.4sec.
0.5sec.
TACHOGRAM
0
50
100
150
200
250
300
Adaptation
Vegetative regulation
Neurohumoral regulation
Psycho-emotional condition
United index of health
Registration Module OFF

fig. 29

To add the user's photo, left-click on the "User's photo" field. A standard Windows screen will open to choose the file with the user's photo. You can choose any image file as the user's photo, without any limitations regarding the image size.

After you finish changing of the user's personal information, left-click on control element in the lower part of the window for the user's personal information edition, to reduce its size.

5.3. User's data editing

To edit any user's data, select the user in the user list, left-clicking on it, then left-click on control element in the lower part of the window for the user's personal information edition, to enlarge it. The detailed description of editing of the user's personal information is provided in "Addition of new user" section.

5.4. User deletion from the list

To delete the user from the list, select the user to be deleted in the user list and left-click on 

. If there are any test data for the selected user, the user deletion confirmation window will open. If any tests for the selected user have not been performed, the deletion operation will be performed without any additional requests.

5.5. Quick search of user

The quick search of the user in the user list is carried out in the "Search" field, located in the upper part of the user list.

If you enter the first letters of the user's surname, the user with the surname containing the letters, entered in the "Search" field, will be immediately selected. If any letter is not entered in the "Search" field, it means that the list does not contain user's surname starting with this letter.

5.6. Data archiving

The database of users can be saved into an archive file. To do this, right-click in any part of the user list. A dropdown menu will open, where you should select "Export" item.

After that, the standard explorer window will open, where you should enter the name of archive and its location. Then, press the "Save" button and wait, until the user list is archived.

The archive, created in such a manner, can further be imported into DePuls+ program.

5.7. Test signal recording

Make sure that green indicator lights in the lower right corner of the program, which means that the RM is ready for operation. If the indicator is gray, the MR is disconnected from the PC or not recognized by the operating system. The red indicator means that the RM, not suitable for operation with DePuls+ program, is connected to the PC.

Connect the electrodes to the user in accordance with the description in "Connection of the DePuls+ resolution module to the user" section. Select the corresponding user in the user list by left-clicking.

Press the button. The registered signal will appear in the user's test signal display field. Check the signal polarity and, if necessary, change it by the / button.

After DePuls+ program detects the correct and stable test signal, the automatic signal recording will start. "Recording in progress" message will appear in the user's signal display field.



If the registered signal shows many interferences or its polarity is confused, "Unsatisfactory signal quality" warning message will be shown in the user's signal display field.



Simultaneously, the program will continue registration until the quality reaches the required level or the registration process is terminated by pressing the button.

During the recording process, the program continuously monitors the quality of the recorded signal. The occurring interferences will be shown by pink colour on the rhythmogram. If there is a lot of interferences, the recording process will be terminated and the program will re-start the test signal registration.

To terminate registration, press the . При регистрации тест-сигнала в pebutton. During the real-time test signal registration, the user's heart rate is displayed, and, as far as the data are accumulated, standard values of current indicators of functional state. If these values significantly change during the registration process, it means that the user is not at rest.

The program also shows the number of registered "RR" intervals during the signal recording. After 300 intervals are recorded, the recording process will automatically stop, and the program will switch to the mode of test result viewing.

Warning!

If the user has a cardiac dysrhythmia, the functional state parameters will be estimated incorrectly. Determination of the functional state parameters in all modes is possible only when the user has a normal cardiac rate!

Examples of such heart arrhythmia are shown in the following figures: (fig. 30, fig. 31)

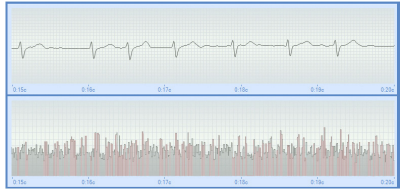


fig. 30

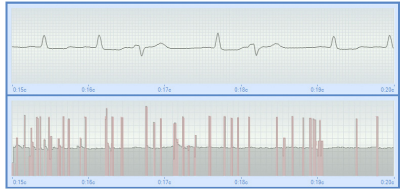


fig. 31

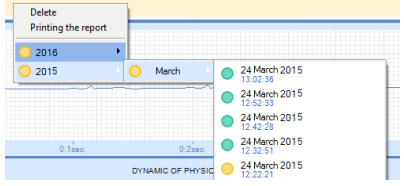


fig. 32

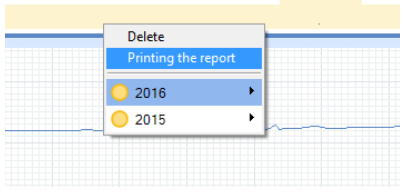


fig. 33

5.8. Test signal viewing (fig. 32)

To view the test results, select the user to be reviewed in the "Names" list. If necessary, you can use the quick search option.

Left-click on any user in the "Name" list and the results of the given test procedure, divided into tabs, will be shown in the test result view block. To select another testing date, it is necessary to use "Test date selection" control element.

5.9. Test result printing (fig. 33)

To print the test result of any user, left-click on the "Test date selection" control element and select "Report printing" in the opened window.

It is possible to select individual report pages for printing in the opened print setting window (a report on the first testing part or general report).



You can also cancel printing of comments to the text, unchecking "Remark printing" box.

If there are no comments to the test results, this box will not be displayed.

6. Troubleshooting

In case of any problems with the complex use, it is recommended to search for the troubleshooting recommendations in this chapter.

If you cannot fix the problem by yourself, it is recommended to carry out the following preparatory activities, before you contact the technical support service:

• Switch on the PC, demonstrating the problem to be solved. Install the DePuls+ complex software and connect the device to this PC. It is not necessary to connect the electrodes to the user.

• In most cases, you can fix the problem in a quicker and easier way, allowing the technical service specialist to connect to your computer through the Internet. To do this, use a special program for technical support. You can run it by means of "Start" button, selecting "All Programs \ DEHolding \ DePuls+ \ Utilities \ Technical Support".

After you start the "Technical Support" program, the screen will display a window (fig. 34), demonstrating the identification number of your PC – 9 numbers in "Your ID" field. Be ready to tell it to the technical service specialists. Tel. +7 (495) 988-57-37, +7 (985) 667-55-96, 9:00 – 18:00 MSK.

Important: do not close the running "Technical Support" program, until you finish communication with the technical support specialist.

After the technical support specialist connects to your PC, please, do not use the keyboard and mouse until you finish the communication.

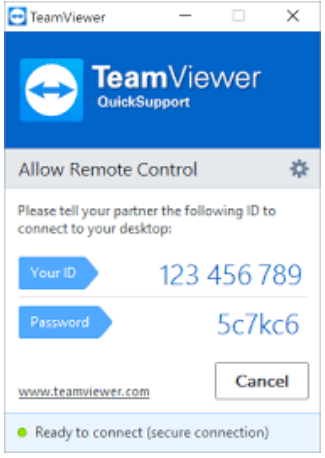


fig. 34

6.1. Program fails to start

Fault symptom: when you try to start the program, nothing happens or an error message appears.

Check the operating system version

• The program is designed only for the following operating systems MS Windows 7 and later.

Reinstall the program

• The program files may be damaged by some other program. The easiest way to fix this problem is to reinstall the program. The users' data will not be affected.

It is recommended to download the latest software version from DEHolding website – www.deholding.info.

Check the antivirus software

• The express test complex software may be locked by the antivirus software, installed on your PC for any reason. It might be caused by a virus attack on your computer, which led to a virus infection of the express test complex software files and a subsequent lock-up.

It is recommended to thoroughly check your PC for viruses and then reinstall the software of DePuls+ express test complex. We strongly recommend the download the latest software version from DEHolding website – www.deholding.info.

6.2. Program does not see the device

Fault symptom: the program is running, the device is connected to the PC, but the test signal recording is impossible and "Registration Module is disconnected":



Check the device connection to your PC.

• The length of the USB cable, used for connection of the device to the PC, should not exceed 2 metres. Longer cables, along with different USB extensions, may interfere with the device correct operation.

• Check the USB port functionality on the PC, connecting any admittedly operating USB device, e.g., USB drive ("flash card"). If the PC has several USB ports, try to connect the device to different USB ports.

Check the device

• There must be no visible damage of the device and connecting cables. If the USB cable is damaged, you can replace it with the analogous one. If the device or electrode cables are damaged, contact the technical support service.

• Check the label on the rear part of the device.

Use only the device, included into the package of the given express test complex.

• The red LED must continuously light on the device connected to the PC, while the blue LED must be off

(it just flashes over a short period, when the device is connected to the PC). If both LEDs light, it means that the device internal memory was damaged due to static electricity. To fix this problem, "Registration module recovery" program is used. You can run it by means of "Start" button, selecting "All Programs \ DEHolding \ DePuls+ \ Utilities \ Registration Module Recovery". (fig. 35).

Enter number "72" in the line named "Enter serial number..." - , and then (without a space) enter the S/N of the registration module which you will find in the passport on the device.

Connect the device, damaged by static electricity, to the PC. Press the "Registration module recovery" button and wait for a short time. If the device recovery is successful, the corresponding message will appear. Otherwise, disconnect the damaged device from the PC, then connect it again, wait for a minute and press the "Registration module recovery" button. If the device does not function properly, contact the technical support service.

Note that, if you mistakenly try to restore the undamaged device, the screen will show "Failed devices not detected". The device memory will be unaffected by the recovery program.

Check the device driver

• Make sure that the operating system of your PC correctly recognized the device. To do this, open Windows OS Control Panel and start the Device Manager (it is in Hardware and Sound section) (fig.36).

• Open "USB controllers" group in the Device Manager and make sure that "USB Serial Converter" is present in the list (fig. 37, 38).

If the list instead shows the device named "Serial -> USB", it means that the device might be damaged by the static electricity. To restore the device, use "Registration module recovery" program.

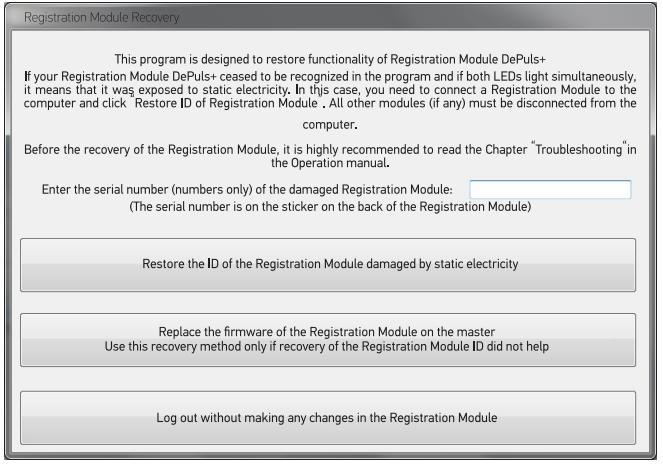


fig. 35

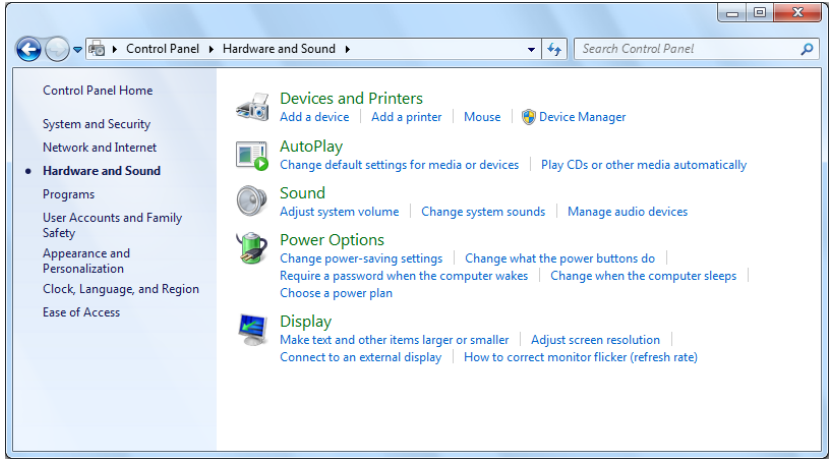

Control Panel ▸ Hardware and Sound ▸
Search Control Panel
Control Panel Home
System and Security
Network and Internet
Hardware and Sound
Programs
User Accounts and Family Safety
Appearance and Personalization
Clock, Language, and Region
Ease of Access
Devices and Printers
Add a device | Add a printer | Mouse | Device Manager
AutoPlay
Change default settings for media or devices | Play CDs or other media automatically
Sound
Adjust system volume | Change system sounds | Manage audio devices
Power Options
Change power-saving settings | Change what the power buttons do |
Require a password when the computer wakes | Change when the computer sleeps |
Choose a power plan
Display
Make text and other items larger or smaller | Adjust screen resolution |
Connect to an external display | How to correct monitor flicker (refresh rate)

fig. 36

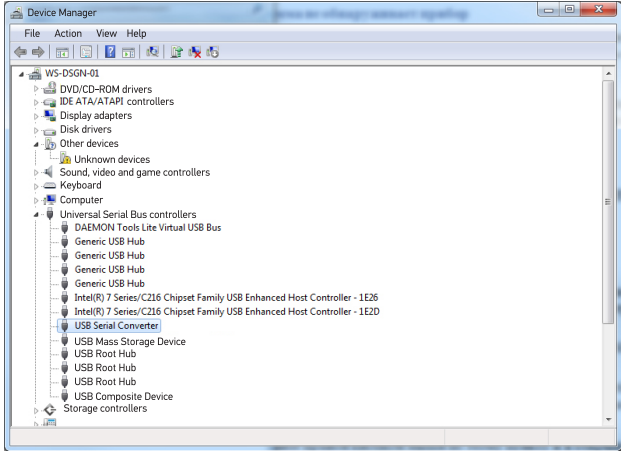

Device Manager
File Action View Help
WS-DSGN-01
DVD/CD-ROM drivers
IDE ATA/ATAPI controllers
Display adapters
Disk drivers
Other devices
Unknown devices
Sound, video and game controllers
Keyboard
Computer
Universal Serial Bus controllers
DAEMON Tools Lite Virtual USB Bus
Generic USB Hub
Generic USB Hub
Generic USB Hub
Generic USB Hub
Intel(R) 7 Series/C216 Chipset Family USB Enhanced Host Controller - 1E26
Intel(R) 7 Series/C216 Chipset Family USB Enhanced Host Controller - 1E2D
USB Serial Converter
USB Mass Storage Device
USB Root Hub
USB Root Hub
USB Root Hub
USB Composite Device
Storage controllers

fig. 37

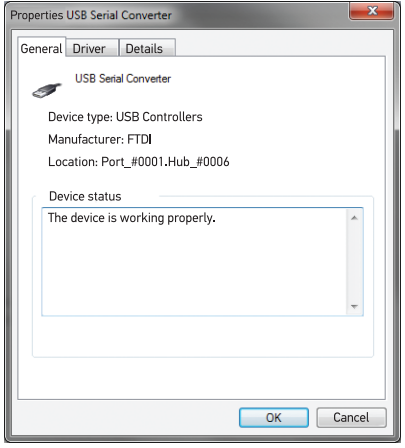


fig. 38

Then, right-click on this item and select "Properties" in the opened menu. The device property window will appear. (fig. 38).

Make sure that "Device status" field shows "The device is working properly", then switch to "Driver" tab and make sure that the installed driver version is not earlier than *2.8.14.0*.

If something of the above-mentioned does not correspond to the actual situation, it is recommended to reinstall the device driver. To do this, open the Windows OS "Start" menu, select "All Programs", then "DEHolding \ DePuls+ \ Utilities \ Install device driver" folder. Before you start the driver installation, make sure that the device is connected to your PC.

6.3. Problems with user list

Fault symptom: the user list does not contain any names, it is impossible to delete some users, the entered names and dates of birth cannot be saved.

Start the system as Administrator

• This fault occurs, because the program is not authorized by the operating system to access the user list on the PC disc.

To ensure normal work with the user list, it is necessary to run the program as administrator. To do this, find the program icon on the desktop, right-click on it and select "Run as Administrator". You may need the administrator's password, you can get to know it from the person who installed the operating system on you PC.

6.4. Problems during test signal registration

Fault symptom: the program recognized the device, but nothing happens, when the button is pressed.

Check settings of your firewall

• It is possible that the firewall on your PC locks up the signal reading from the device. The procedure of lock-up cancelling is described in "Preparation for work" chapter in this manual.

Fault symptom: the signal is read, but recording does not start.

Make sure that the electrodes are connected in a proper way.

• The electrodes must be put on the user's hands in accordance with the description in "Preparation for work" chapter in this manual.

Check the electrode cable integrity

• The wires, connecting the electrodes with the device, can tear due to a long-time or careless use. This cannot be detected visually, since only the copper wire is damaged, but its plastic braid remains unaffected.

To check the cable integrity, start the test signal registration in the program, then connect both plugs of the device, so that their metal parts are in a tight contact. The registered signal must have the form of a straight line, when the electrodes are interconnected. (fig. 40)



fig. 38

Otherwise, and if the signal still has a chaotic character, it confirms the internal rupture of the electrode cables. In this case, contact the technical support service (exclusive distributor, warranty and service support).

Check the signal polarity

• It is possible that the signal polarity is incorrect, i.e. the electrodes for the right and left arms are confused. This situation is easily detected by the registered ECG signal form: (fig. 40, fig. 41)



fig. 40,
proper signal



fig. 41,
disturbed polarity

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(Business Centre building), office 1507.