

iMETT User Manual

WOODWAY®
For The Long Run®



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WOODWAY SERVICE PROVIDER INFORMATION SHEET

NAME OF COMPANY: _____

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MAJOR CITIES AND AREAS YOUR COMPANY SERVICES: _____

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WOODWAY History

WOODWAY's history began in Germany in 1974. Willi Schoenberger, a technical director in charge of planning a fitness center, noticed that the most important piece of equipment, the treadmill, did not meet the most important requirements: a mechanically sound machine that is designed to meet human needs.

He envisioned a comfortable surface that did not interfere with the natural biomechanics of running or walking. Also, he wanted to design a transportation system which eliminated the friction associated with the conventional (conveyor belt) treadmills. After intensive research, and trial and error (and in cooperation with the Deutsche Sporthochschule in Koln, Germany), Willi developed and patented a very unique and revolutionary treadmill design.

In 1975, WOODWAY GmbH was founded in Weil am Rhein, Germany. The name "WOODWAY" is derived from the German "Waldweg" (Wald = Wood and Weg = Way) – the feel of running on a soft pine needle covered path in the forest.

In 1983, a manufacturing license was awarded to Sakai Medical, for the use of WOODWAY technology in the Japanese marketplace.

In 1988, a U.S. license was granted to a small, but well-established manufacturing company in Waukesha, Wisconsin. WOODWAY USA was formed when the U.S. incarnation of the WOODWAY was developed and completed in 1990. WOODWAY USA is very proud to be the primary manufacturer of WOODWAY Treadmills worldwide, exporting treadmills each month to Germany and Japan for international distribution, in addition to serving our domestic customers and clients.

Today, WOODWAY's design and manufacturing facilities in the United States, Germany and Japan make WOODWAY the largest specialized treadmill manufacturer in the world. Constant enhancements in quality, design and function are shared and implemented by all three WOODWAY manufacturers.

Section 1: Galileo

WARRANTY STATEMENT

WOODWAY ensures to the owner of the product identified below, a warranty for operations within the specifications during a period of:

1 (one) year, as of the date of installation of the software.

iMETT Galileo

This warranty is applied only to the parts, labor and equipment provided by WOODWAY, that, in case of proven problem caused by manufacturing defects, WOODWAY has a commitment of repairing or substituting, at its choice, the defective product or part.

Other warranties are not offered, other than the ones expressed in this WARRANTY STATEMENT or in another document offered to the client by WOODWAY. Therefore, the warranties concerning the items below are EXCLUDED from this statement:

- Ceasing of profit, due to the absence of the equipment to repair;
- Any other reimbursements due to a bad operation of the equipment.

In any use of this warranty, the financial duties of WOODWAY will not exceed the amount paid by the client to WOODWAY.

The services from repairs done under this warranty will be offered at WOODWAY's headquarters, located in Waukesha – DF, or by a WOODWAY certified service provider. All the costs from dislocating technicians to other locations, apart from Waukesha, WI, and / or freight and packaging for the transportation of the equipment will be the responsibility of the client.

This warranty includes parts, labor and replacement of equipment, if necessary, provided the damages have not been caused by:

- improper operation, improper use or damages caused by a power supply not in accordance with the rules set by WOODWAY;
- opening / maintenance or replacing of parts performed by technicians not authorized by WOODWAY;
- using software or installing interfaces and / or peripherals that are not specifically authorized by WOODWAY;

- alterations to the set-up of the equipment or installations without a previous agreement by WOODWAY;
- operation done out of the technical or environmental specifications set for the product;
- imperfection on the packaging or improper transportation, when this transportation is carried out by the client or by companies authorized by the client including when this transportation happens due to repairs completed under this warranty;
- damages incurred due to turmoil, war, natural phenomena or civil disturbances;
- introduction of computer viruses due to the installation of software performed by individuals not authorized by WOODWAY.

MICROMED is not obligated to update or modify its products after its sale and those modifications will not necessarily be communicated to the client.

INTRODUCTION

Galileo is the most complete and flexible physical assessment system ever created. It was designed to be a complete solution for gyms, personal trainers, universities, clinics and all who require a complete and user friendly physical assessment system at a low cost.

The standard iMETT software allows for the assessor to run the following modules:

- **Standard Modules:** Anamnesis, Online Fitness Test, Ventilatory Threshold, and Manual Stress Test.
- **Additonal Modules Available:** Body Composition, Perimetry, Muscle Strength, Somatotype, Flexibility, Flexibility-Angles, and Postural Analysis.

The iMETT software will not interfere with your existing or future software programs.

The iMETT system utilizes a heart rate sensor, FitView, which allows the reception of the heart rate from a standard non codified Polar® heart rate monitor strap.

The iMETT software is compatible with Windows 95, 98, ME, 2000 and XP, and Vista. It can be run on PC's or laptops.

NOTE: In order to run the optional FitView in computers with no serial ports available, contact Woodway technical support for options on purchasing adapters.

Galileo's comprehensive reports make understanding the results of your physical assessment very easy. This assessment can be completed in groups or individually, helping to provide great flexibility when setting up workout programs.

The iMETT software has the ability to provide a unique user identification and store that particular user's past testing results and programs to track the user's progression.

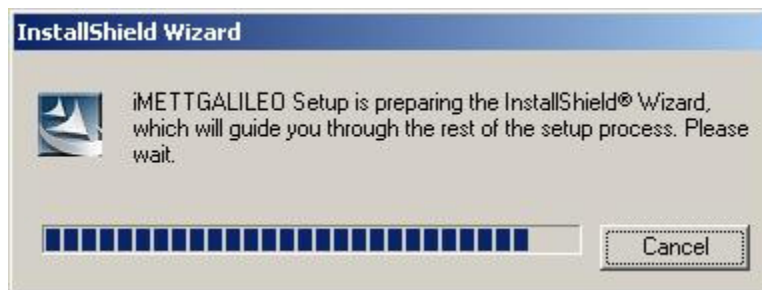
SETUP

Insert the setup CD and follow the onscreen instructions to install the iMETT Galileo software:

1. Select the language. English or Portuguese.

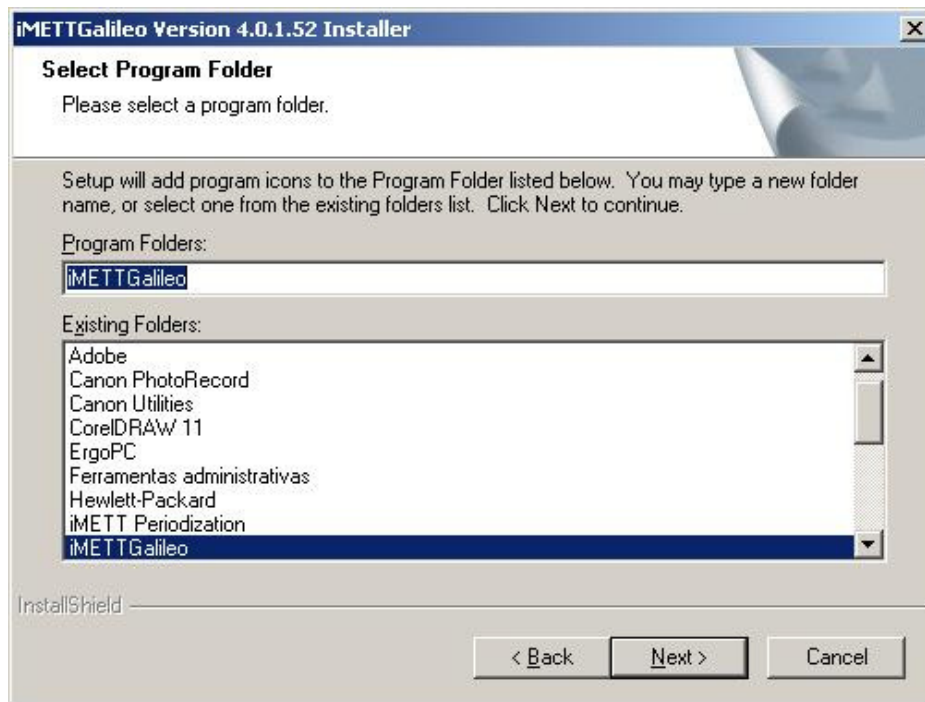


2. In the event that you wish to terminate the installation process, simply click the CANCEL button at any time.

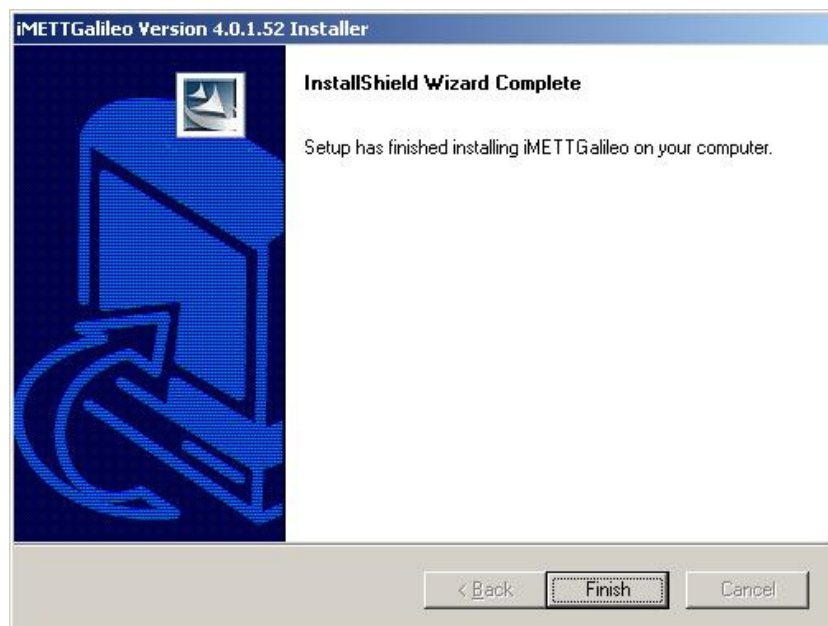


3. To install Galileo, click NEXT.
4. To install the software in a specific folder, select BROWSE, then select the desired folder. Select NEXT to continue with setup.

5. Select a program folder. Click NEXT to continue.



6. Wait while the setup is being performed and the HAPS driver is being installed.
7. Installation is complete. Select FINISH. Insert the USB dongle in the port of your computer. Your Galileo software is ready to run.



FIRST USE OF SOFTWARE

ENVIRONMENT

MODULES

PROTOCOL AND PARAMETER EDITOR

Attention! It is important to perform this configuration before starting the assessments. If you attempt to make changes after performing assessments, your data may be lost or altered. You must save your configuration settings when you are finished by clicking OK.

Using the Galileo software for the first time

To use the iMETT Galileo software, the HASP key / USB dongle must be connected to the USB output of your computer at all times.

In the event that the HASP key / USB dongle is not connected, the message box below will pop up when you attempt to start the software. If this occurs, select OK and insert the HASP key / USB dongle and then restart the software.



When you first start the software, you will be prompted to select a language. Make this choice and then click OK.



Environment

To open the *environment* configuration using the menu ba, select CONFIGURATION → ENVIRONMENT.

This form consist of 8 cards of configuration: *general, body composition, perimetry, postural analysis, stress test, somatochart, flexibility, and search zone.*

GENERAL

User Data Configuration:

- Fill in the user's personal data in the areas labeled *name, address* and *telephone*.
- Select the buttons related to the *units of measurement and power units* you wish to use for the test.
- Select the *language* which you want to work with by selecting the down lateral arrow in the reference area and choosing the desired idiom.

The screenshot shows the 'Enviroment' configuration window with the 'General' tab selected. The window has a title bar with a red 'X' icon and the text 'Enviroment'. Below the title bar are tabs for 'Somatochart', 'Flexibility', and 'Search Zone'. The 'General' tab is active, showing fields for 'Name' (with a sub-label 'Service Name'), 'Address' (with a sub-label 'Service Address'), and 'Phone' (with the value '66-888-9988'). There are also radio buttons for 'Measurement Units' (English selected, Metric unselected) and 'Power Units' (Watts selected, Watts/kg unselected). A 'Language' dropdown menu is set to 'English'. On the right, there is a 'Logo' section with a preview of the 'iMETT' logo and buttons for 'Change Logo' and 'Delete Logo'. Below the logo is a 'Printing' section with three checkboxes: 'Report targes color' (unchecked), 'Report targes font color' (unchecked), and 'Report unic bars color' (unchecked). At the bottom are 'Ok' and 'Cancel' buttons.

Customizing Your Software Environment:

Changing layout color scheme

The iMETT Galileo software gives you the option to customize the color of the bars and the font of the report. Select the reference buttons on the area *printing* and select the desired color. Select OK. If you prefer the option of having a single color for all bars of the main reports, select this option by choosing *report unic bars color*.

Inserting Your Company Logo

To modify the logo, select CHANGE LOGO, search for a new logo in your files and insert it. New logo must be in Bitmap format and no larger than 900 x 600.

To delete the logo, select DELETE LOGO. A deleting confirmation box will pop up. Select YES to delete the logo. Select NO to cancel the action.

After configuring the card GENERAL, select OK to save the current changes and leave the *environment* option.

Modules (included with purchase of Premium Package)

1. BODY COMPOSITION (optional module)

General configurations

Selecting the *Body Composition Measurement Method*

Click on the lateral down arrow to select *calculated by system*, *bioimpedances* or *others*. In case of an *others* option, type the name of the method on the area titled *another method*.

Selecting the Desired Partitioning

In the area *default formula for body composition calculation* you have the ability to customize the formula for body composition. You can either choose *selected by system*, or manually choose the desired formula. If you wish to do it manually, use the lateral down arrows for *fat percentile*, *bone weight*, and *residual weight*. Repeat this process for *measures values calculus* and *standard graph style* and click OK to save the configurations.

The image shows a software dialog box titled "Partitioning". It contains several sections with radio buttons and dropdown menus. The "Partitioning" section has two radio buttons: "Fat Weight and Lean Weight" (selected) and "Fat, Lean, Bone, Muscular and Residual weights". The "Default formula for Body Composition calculation" section has a checkbox "Selected by system" (unchecked) and three dropdown menus: "Fat Percentile" (set to "Jackson & Pollock - 3 skinfolds(Fem)"), "Bone Weight" (set to "Von Döbeln's formula"), and "Residual Weight" (set to "Würch's formula - Fem"). The "Measures values calculus" section has two radio buttons: "Use the mean value" (selected) and "Use the median value". The "Standard graph style" section has two radio buttons: "Bar chart" (selected) and "Pie chart". At the bottom are "Ok" and "Cancel" buttons.

Section	Option / Formula
Partitioning	<input checked="" type="radio"/> Fat Weight and Lean Weight
Partitioning	<input type="radio"/> Fat, Lean, Bone, Muscular and Residual weights
Default formula for Body Composition calculation	<input type="checkbox"/> Selected by system
Default formula for Body Composition calculation	Fat Percentile: Jackson & Pollock - 3 skinfolds(Fem)
Default formula for Body Composition calculation	Bone Weight: Von Döbeln's formula
Default formula for Body Composition calculation	Residual Weight: Würch's formula - Fem
Measures values calculus	<input checked="" type="radio"/> Use the mean value
Measures values calculus	<input type="radio"/> Use the median value
Standard graph style	<input checked="" type="radio"/> Bar chart
Standard graph style	<input type="radio"/> Pie chart

Calculation of the Target Weight

To calculate target weight, enter multipliers in the necessary fields (noting different options for male and female subjects).

The screenshot shows a software window titled "Enviroment" with a standard Windows-style title bar (minimize, maximize, close buttons). The window has a tabbed interface. The top row of tabs includes "Somatochart", "Flexibility", and "Search Zone". The second row of tabs includes "General", "Body Composition", "Perimetry", "Postural Analysis", and "Stress Test". The third row of tabs includes "General Config", "Target Weight Calc", and "Printing". The "Target Weight Calc" tab is currently selected. Inside this tab, there is a section titled "Target Weight Multipliers". This section is divided into two main areas: "Male subjects" and "Female subjects". Each area contains three rows of input fields for different activity levels: "Sedentaries", "Active", and "Athletes". Each row has a text input field followed by the text "times the lean weight". For Male subjects, the values are 1.20, 1.18, and 1.16 respectively. For Female subjects, the values are 1.22, 1.20, and 1.18 respectively. At the bottom of the window, there are two buttons: "Ok" and "Cancel".

Subject	Activity Level	Multiplier	Description
Male subjects	Sedentaries	1.20	times the lean weight
	Active	1.18	"
	Athletes	1.16	"
Female subjects	Sedentaries	1.22	times the lean weight
	Active	1.20	"
	Athletes	1.18	"

2. PERIMETRY

- To insert a girth to be used, select it from the list named *available perimeters*. Select ADD PERIMETER or drag it to the desired position (it will be highlighted with a red underline on the board *selected perimeters for use*).
- To delete a perimeter, select it on the list related to the *perimeters selected for use* and click DELETE PERIMETER.
- Select OK to save the configurations or select CANCEL to cancel the changes.

Enviroment

Somatochart Flexibility Search Zone

General Body Composition **Perimetry** Postural Analysis Stress Test

Perimeter Picture

Available Perimeters

Name
▶ Chest Girth
Distal Left Thigh Girth
Distal Right Thigh Girth
Hip Girth
Left Arm (Flexed/Tensed) Girth
Left Arm (relaxed) Girth
Left Calf Girth
Left Forearm Girth

Perimeters Selected for Use

Number	Name
▶ 1	Shoulder Girth
2	Chest Girth
3	Waist Girth
4	Waist (lower) Girth
5	Hip Girth
6	Right Arm (relaxed) Girth
7	Right Arm (Flexed/Tensed) Girth
8	Right Forearm Girth

Add Perimeter
Delete Perimeter
Move Up
Move Down

Ok Cancel

3. POSTURAL ANALYSIS (optional module)

The *postural analysis* module is composed of four pictures which can each have 16 sentences as well as the group name set as standard.

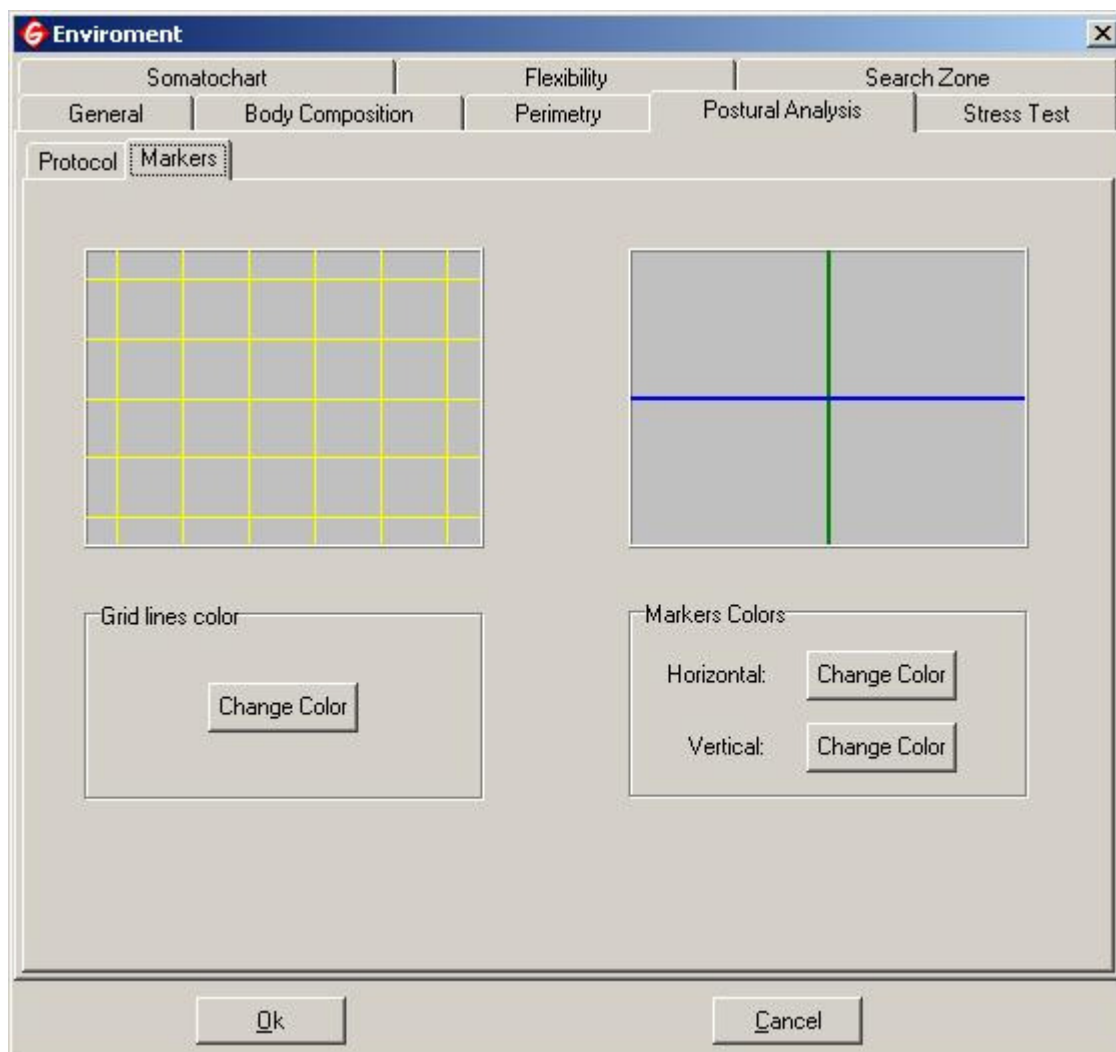
Protocol

To insert the name of the group or sentences, click on the desired space and enter the information. Select OK to save changes and leave the configuration *environment* or select CANCEL to cancel the modifications.

The screenshot shows the 'Enviroment' software interface. The main window has a title bar with the 'Enviroment' logo and a close button. Below the title bar are several tabs: 'Somatochart', 'Flexibility', 'Search Zone', 'General', 'Body Composition', 'Perimetry', 'Postural Analysis', and 'Stress Test'. The 'Postural Analysis' tab is selected. Within this tab, there are sub-tabs for 'Protocol' and 'Markers'. The 'Protocol' sub-tab is active. Under the 'Protocol' sub-tab, there is a section titled 'Posture Defects:'. This section contains four view buttons: 'Prior View', 'Right Side View', 'Next View', and 'Left Side View'. Below these buttons is a 'Group Name:' label followed by a text box containing 'Prior View'. Underneath the 'Group Name' field is a section labeled 'Defect Names:'. This section contains a grid of 16 text boxes, each preceded by a number from 1 to 16. Each text box contains the word 'Phrase'. At the bottom of the window are two buttons: 'Ok' and 'Cancel'.

Markers

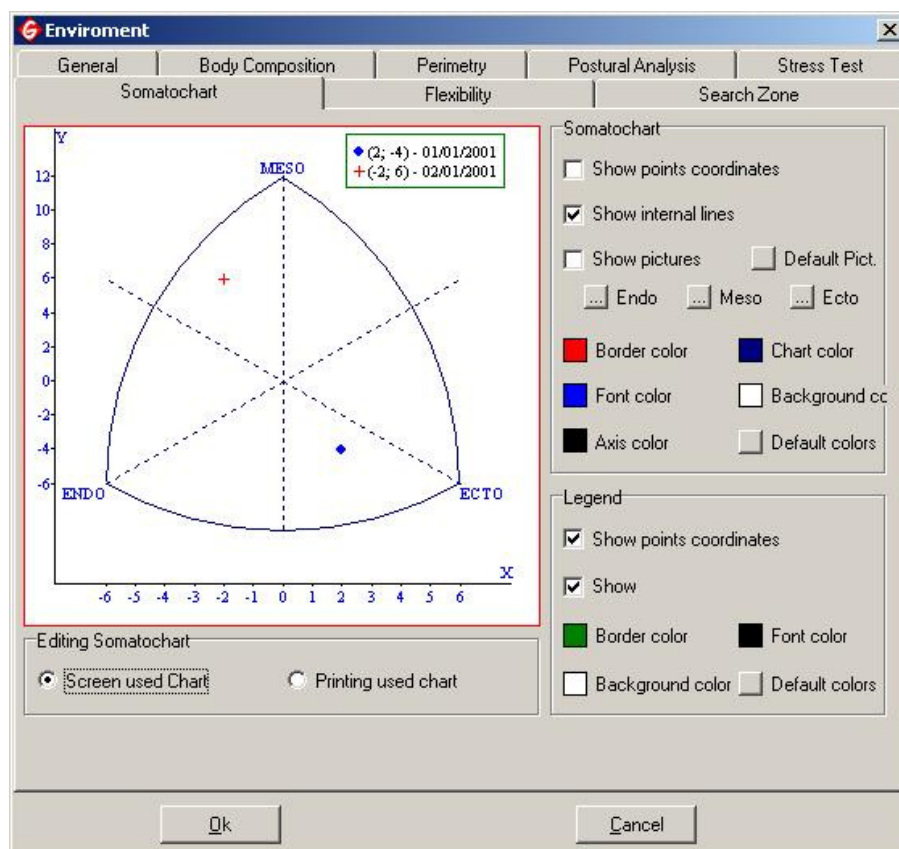
To edit the *grid lines color* and the *markers colors* (horizontal and / or vertical), select CHANGE COLOR, select the desired color and then select OK.



4. SOMATOCHART (optional module)

In *editing somatochart*, you will be able to choose editing between *screen used chart* or *printing used chart* selecting the button that you prefer. To personalize the way in which the information will be presented on the *somatochart*, simply select the reference buttons: *show points coordinates*, *show internal lines*, *show pictures*. The pictures can also be personalized by selecting the button related to the picture that you want to set up and search for in your files. To set up the color of the *border*, *font*, *axis*, *chart* or *background*, select the color reference box, select the color and click OK. To restore the system default colors, select the button *default colors*.

In *legend*, you can choose *show points coordinates* and / or *show (the legend itself)* selecting their reference buttons. To set up the color of the *border*, *font*, *background*, select the color reference box, select the color and click OK. To restore the system default colors, select the button *default colors*.



5. FLEXIBILITY (optional module)

In *joints* you can select the joints by clicking on the desired name by moving the scrolling bar, or by selecting MOVE UP or MOVE DOWN. If the area *active* has a red 'X' it means that the related joint is disabled. To enable it, click on the red 'X' to turn it to a green check. To disable, click on a green check and it will turn into a red 'X'.

Enviroment

General | Body Composition | Perimetry | Postural Analysis | Stress Test

Somatochart | Flexibility | Search Zone

Joints:

Num.	Name	Avr.	Active
1	Shoulder Joint	1	X
2	Hip Joint (knee extended)	1	X
3	Hip Joint (knee bended)	1	✓
4	Torso bend	1	✓

Add joint | Move Up | Delete Joint | Move Down

Classification Tables:

Male | Female | Ref. Src.

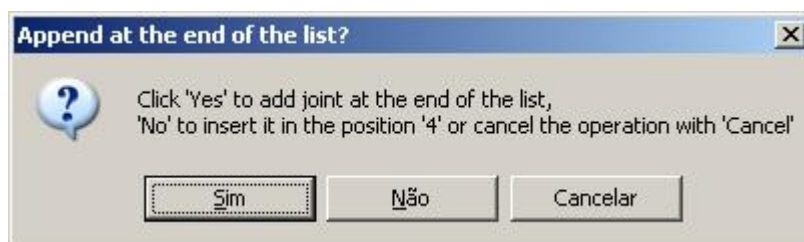
Classification	Interval
Limited	< 90
Normal	>= 90

Picture :

Add | Delete | Save

Ok | Cancel

To insert a joint, select it from the list and select ADD JOINT. Type in the information and click ENTER. If the desired position is the last one on the list, after selecting ADD JOINT, the message box below will pop up. Select YES to add the information at the end of the list or select NO, to insert the information into the previous position. To cancel the action, select CANCEL. To delete a joint, select it from the list and click DELETE JOINT.



In *classification tables*, choose male or female and insert or edit information. There must be coherence among the cells of the typed values. In order to know the inserted data references, as well as to leave the current reference viewed, select REF. SRC. and type the new information.

Classification Tables:	
Male	Female
	Ref. Src.
Classification	Interval
Limited	< 35
Normal	>= 35
Abdallah Achour Jr.	

To insert or replace pictures, select from the *joint* list the joint to which you want to attach the picture. In *pictures*, select ADD and search for the picture within your files. Select SAVE to keep the modifications. Select OK to save or CANCEL to leave.

Protocol and Parameter Editor

iMETT Galileo has a formula and parameter editor that allows the user to register any body composition formula. When entering the screen of the protocol editor, you will see a list with all the formulas automatically registered in the system.

You can set up the *Protocol and Parameter Editor*, through the menu bar, selecting CONFIGURATION ➔ PROTOCOL AND PARAMETER EDITOR. The editor has two cards: *Protocols* and *Parameters*.

The screenshot shows the 'Protocol Editor' window with the 'Protocols' tab selected. It contains a table of protocols and a formula editor.

Name	Gender	Subject	Minimum Age	Maximum Age
Data gathering	Both	All	0	100
Faulkner	Both	All	18	100
Forsyth & Sinning (Athlete - Male)	Male	Athlete	14	19
Gray et al (Hispanics) Bia	Female	All	20	40
Gray et al (Obese %FAT = 19 to 59%) Bia	Female	All	0	100
Gray et al (Obese %FAT = 9 to 45%) Bia	Male	All	0	100

Below the table is a formula editor with a text area containing the following formula:

$$(\text{Subscapular Skinfold} + \text{Toraxial Skinfold} + \text{Triceps Skinfold} + \text{Biceps Skinfold} + \text{Suprailiac Skinfold} + \text{Abdominal Skinfold} + \text{Supraspinale Skinfold} + \text{Medial Thigh Skinfold} + \text{Mildaxillare Skinfold} + \text{Medial Calf Skinfold} + \text{Femur Breadth} + \text{Humerus Breadth} + \text{Radio Ulnar Breadth}) * 0$$

At the bottom, there is a 'Parameters' list and a calculator keypad.

Parameters:

- Abdominal Skinfold
- Age
- Biceps Skinfold
- Bioimpedance
- Body Fat Percentile

Calculator keypad buttons: ^, SQRT, (,), CE, C, and, ATAN, 7, 8, 9, /, LOG, TAN, 4, 5, 6, *, LN, COS, 1, 2, 3, -, ABS, SIN, Calc, 0, ., +.

Buttons: New Protocol, Delete Protocol, [Lightbulb icon], Ok.

PROTOCOLS

The following instructions concern the 3 cards of *protocols*: *fat percentile*, *bone weight* and *residual weight*. To insert a new protocol, select NEW PROTOCOL. A new line will appear at the end of the list of protocols. Insert the data related to the *name*, *minimum age*, and *maximum age*. To insert information concerning *gender* and *subject*, double click on the respective area and select the desired option using the lateral down arrow.

Percentual de Gordura	Peso Ósseo	Peso Residual			
Nome			Sexo	Indivíduo	Idade Mínima Idade Máxima
▶	Data gathering		Ambos	Todos	0 100
	Faulkner		Ambos	Todos	18 100
	Forsyth & Sinning (Athlete - Male)		Masculino	Sedentário	14 19
	Gray et al (Hispanics) Bia		Feminino	Ativo	20 40
	Gray et al (Obese %FAT = 19 to 59%) Bia		Feminino	Atleta	0 100
	Gray et al (Obese %FAT = 9 to 45%) Bia		Masculino	Todos	0 100

To insert the formulas, the *protocol editor* comes with an alphanumeric keyboard with the same definitions of a calculator. For example, you use an asterisk (*) to multiply, a slash (/) to divide, parenthesis [()] to indicate the sum of all parameters. When you insert a formula, you will be able to follow one of the options below:

1. Use the alphanumeric keyboard of the *protocol editor* by clicking on its alphanumeric icons.
2. Click in the formula display and type the information through the keyboard of your computer.

To insert the *parameters*, double click on the name of the parameter that you want on the list of names. You can delete data by using the BACKSPACE key on your keyboard or pressing the CE icon.

(Subscapular Skinfold + Toraxiac Skinfold + Triceps Skinfold + Biceps Skinfold + Suprailliac Skinfold + Abdominal Skinfold + Supraspinale Skinfold + Medial Thigh Skinfold + Mildaxillare Skinfold + Medial Calf Skinfold + Femur Breadth + Humerus Breadth + Radio Ulnar Breadth) * 0

Parâmetros:

Nome
Abdominal Skinfold
Age
Biceps Skinfold
Bioimpedance
Body Fat Percentile

Novo Protocolo Excluir Protocolo

Ok

To test the registered formula, select CALC. A test box will pop up. Type the values of the *parameters*, the required measurements, and select OK. The result will be displayed after the calculations are done.

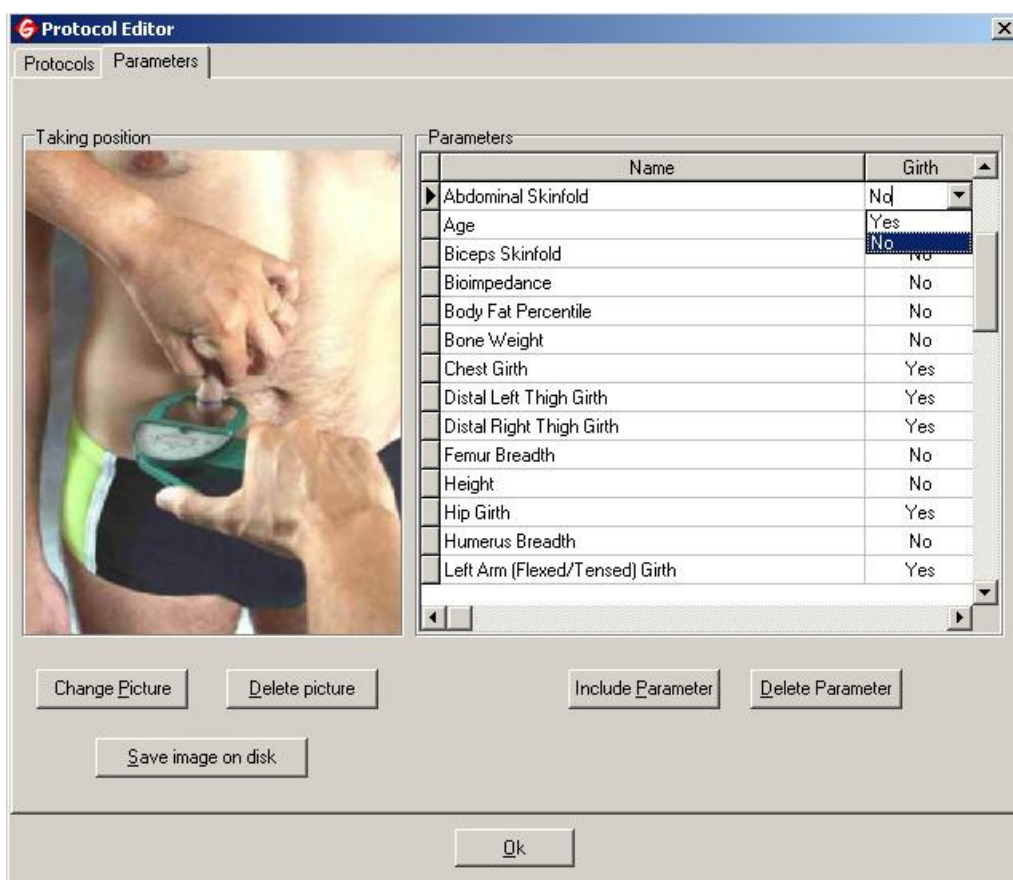
To delete a protocol, select it from the list and then select DELETE PROTOCOL. A confirmation box will pop up. Select YES to delete or NO to cancel the action.

Data capture formula

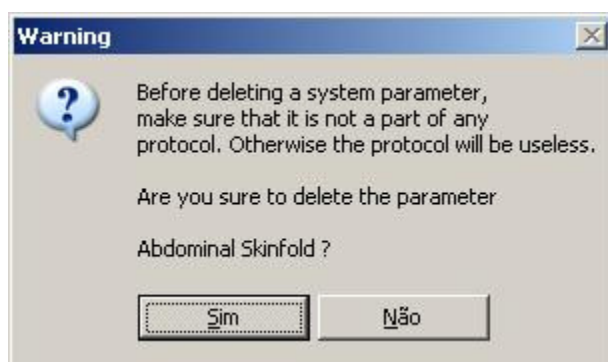
After the modifications with the editor are complete, select OK to register the modifications and quit the *Protocol Editor*.

PARAMETERS

If the protocol that you wish to use requires a specific parameter that is not registered, you can insert it. To insert a new parameter, select INCLUDE PARAMETER and type the name of it. If the new parameter is a girth, select YES on the area of the *Girth* column by clicking and selecting it with the lateral down arrow.



To delete a parameter, select DELETE PARAMETER. The confirmation box below will pop up to warn you that if the parameter is part of another protocol, that protocol can be damaged. Select YES to confirm the deletion or NO to cancel the action.



To change the picture, select CHANGE PICTURE and search for it in your files. To save the picture, select the icon SAVE IMAGE ON DISK. To delete the picture, select DELETE PICTURE. To save the modifications and quit the *Protocol Editor* select OK.

SOFTWARE COMPONENTS

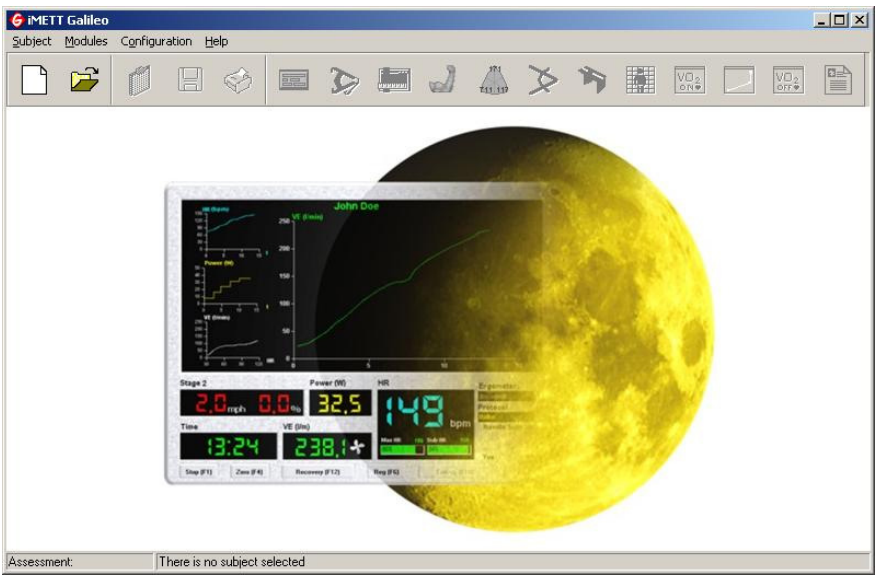
ANAMNESIS

ONLINE STRESS TEST

VENTILATORY THRESHOLD

OFFLINE STRESS TEST

From the home screen of the software, you begin to use the system by selecting SUBJECT
→ NEW in the menu bar.



You can also begin by selecting the icon CREATE A NEW SUBJECT below the menu bar.



Insert the subject data of the subject by clicking and typing on the reference areas.

The screenshot shows the 'Subject' data entry form. The form has a title bar with the text 'Subject' and a close button. Below the title bar is a tab labeled 'Data'. The form contains several input fields: 'Name' (a text box), 'Gender' (a dropdown menu), 'Birthday Date' (a date picker), 'ID' (a text box), 'Address' (a text box), 'City' (a text box), 'Phone (Home)' (a text box), 'State' (a dropdown menu), 'Phone (Work)' (a text box), and 'ZIP' (a text box). At the bottom of the form are three buttons: 'Save', 'New Assessment', and 'Cancel'.

The areas *name*, *birth date*, *gender* and *ID* are mandatory. If one of these areas is left blank, an error message will pop up. Select OK and fill in the missing areas. Select SAVE to register the data into the system, and then the card *open* is activated.

To begin an assessment, select NEW SUBJECT. Select OK to save the information inserted and close the window or select CANCEL, to cancel the actions and close the window.

When selecting SAVE, the card *open* will be activated. This is where you will find subjects that are registered in the system and their assessments. To find a name, you can type in the first letter of the name in the area *active subject* or simply scroll through the list until you find it. To insert a new subject, select NEW SUBJECT. The *data card* will open. Follow the steps described above to fill in the subject data.

The screenshot shows a software window titled "Subject" with two tabs: "Open" and "Data". The "Open" tab is active. The window is divided into two main sections: "Subjects" and "Assessments".

Subjects Section:

- There is a text input field labeled "Active Subject" which is currently empty.
- To the right of this field is a "Birth Date" input field containing "08/22/1986".
- Below the "Active Subject" field is a table with two columns: "Name" and "Birthday Date".
- The table contains one row: "Jonh Miles" | "08/22/1986".
- To the right of the table are two buttons: "New Subject" and "Delete Subject".

Assessments Section:

- Below the "Subjects" section is a table with two columns: "Number" and "Date".
- The table contains one row: "1" | "2/14/2005".
- To the right of the table are three buttons: "Open Assessment", "New assessment", and "Delete assessment".

At the bottom of the window are two buttons: "Ok" and "Cancel".

To delete a subject already inserted, select DELETE ASSESSMENT. The deletion confirmation box will pop up. Select YES to continue or select NO to cancel the action.

Anamnesis

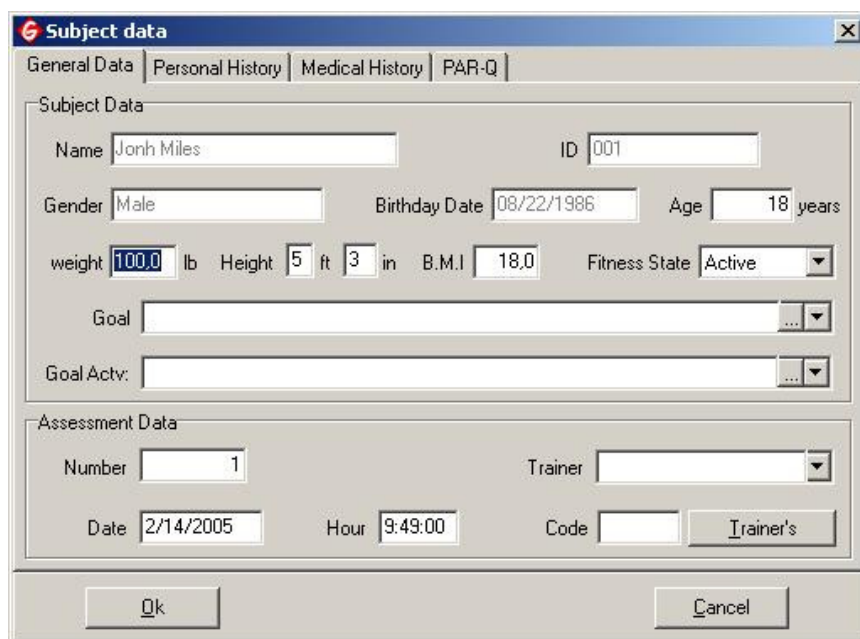
When you select NEW SUBJECT, the module **ANAMNESIS** is enabled. It also can be opened through the menu bar by selecting MODULES → ANAMNESIS or selecting the icon FILL OR CHANGE THE SUBJECT DATA, below the menu bar:




This module has four cards:

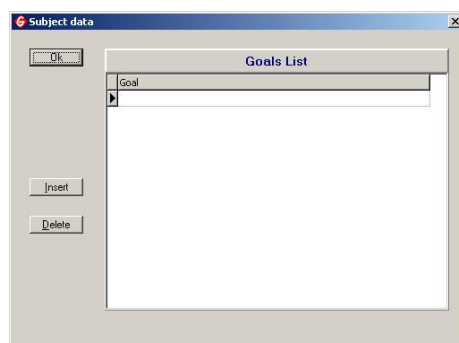
General Data


In *General Data*, some areas will come automatically filled in if the information was previously inserted on the card *data*. Fill in the areas related to the *weight*, *height*, and *B.M.I.*, by selecting and typing the necessary information.

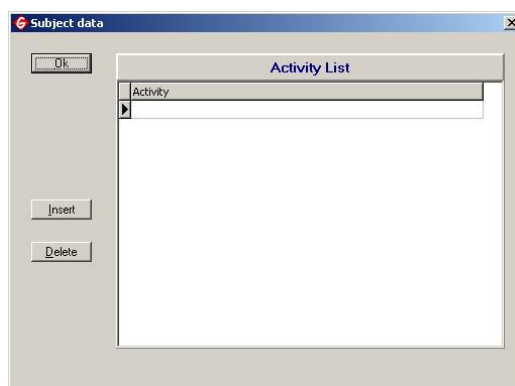
A screenshot of a software window titled "Subject data". The window has a tabbed interface with four tabs: "General Data", "Personal History", "Medical History", and "PAR-Q". The "General Data" tab is selected. The form contains several input fields and dropdown menus. Under "Subject Data", there are fields for "Name" (Jonh Miles), "ID" (001), "Gender" (Male), "Birthday Date" (08/22/1986), "Age" (18 years), "weight" (100.0 lb), "Height" (5 ft 3 in), "B.M.I" (18.0), "Fitness State" (Active), "Goal", and "Goal Actv:". Under "Assessment Data", there are fields for "Number" (1), "Trainer", "Date" (2/14/2005), "Hour" (9:49:00), "Code", and a button labeled "Trainer's". At the bottom of the window are "Ok" and "Cancel" buttons.

In the case that the weight and / or the height are missing, an error box will appear. Click OK and fill in the missing information.

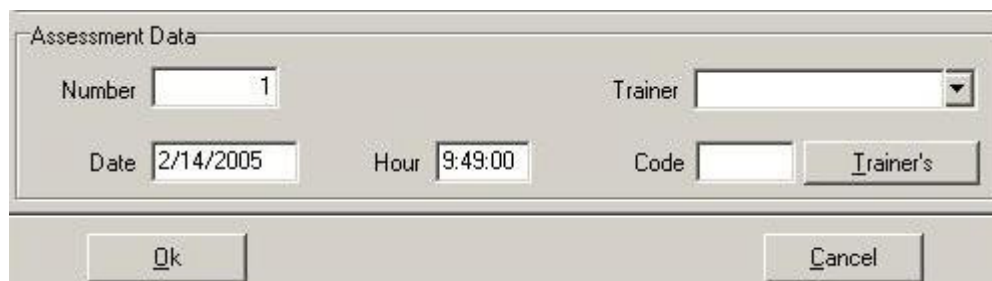
In *goals list*, use the arrow to select the desired goal. To insert a goal, select the icon with suspension points  on the lateral part of this area. Select INSERT and type the information. Select OK to save the inserted goal or select DELETE to delete the selected goal.



In *goal activity*, use the arrow to select the desired activity. To insert an activity, select the icon with suspension points  on the lateral part of this area. Select INSERT and type in the information. Select OK to save the activity inserted or select DELETE to delete the selected activity.



In *assessment data*, insert the name of the trainer from the list using the lateral down arrow or select and type the registration number of the trainer in the area titled *code*.




To insert a trainer, select the icon TRAINERS. Select INSERT and type the name and the ID of the trainer and then select OK to register the trainer in the system. Select DELETE to delete the registration of a trainer that is selected on the list. Select OK to save the registrations performed and exit anamnesis module or select CANCEL, to cancel the actions performed.

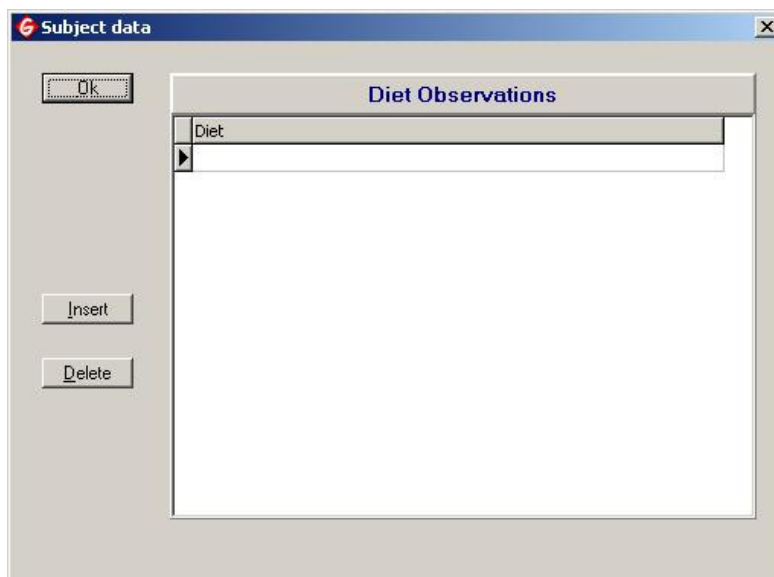
The screenshot shows a window titled "Subject data" with a tabbed interface. The "Trainers List" tab is active, displaying a table with two columns: "Name" and "ID". The table is currently empty. To the left of the table are three buttons: "Ok", "Insert", and "Delete".

Personal History

In the *smoking* section, select the button related to the smoking status of the subject. Type in relevant information in the areas related to length of time and frequency of smoking.


The screenshot shows the "Subject data" window with the "Personal History" tab selected. The "Smoking" section contains three radio buttons: "Non smoking", "Ex-smoker", and "Smoker". Each radio button is followed by input fields for "Smokes for how long:" (years and months) and "Quit for how long:" (years and months). The "Smoker" option is followed by a "Cigarettes per day:" input field. The "Diet" section has a "Meals/day:" input field and an "Obs.:" dropdown menu. The "Current Physical Activity" section has an "Activity:" dropdown menu, a "Periodicity:" input field (days/week), a "Duration:" input field (years and months), and an "Intensity:" dropdown menu. The "Notes" section has a large text area. At the bottom are "Ok" and "Cancel" buttons.

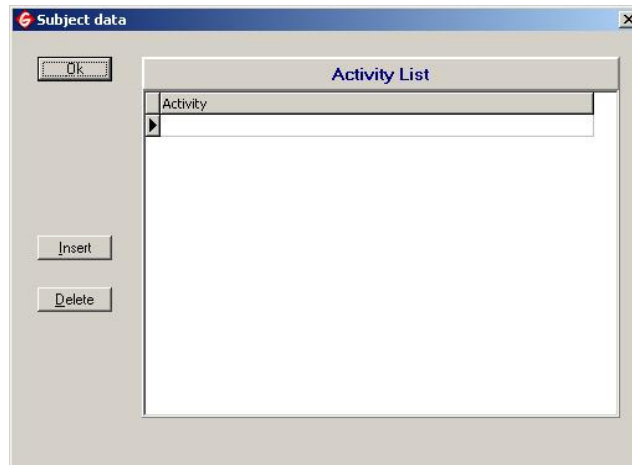
In *diet*, type in the reference area the quantity of meals the subject has a day. With the lateral down arrow of the area *observations*, select the desired information on the list. To insert a new observation, select the icon with suspension points. Select INSERT and type the new information. Select OK to register the information in the system. Select DELETE to delete the selected information from the list.




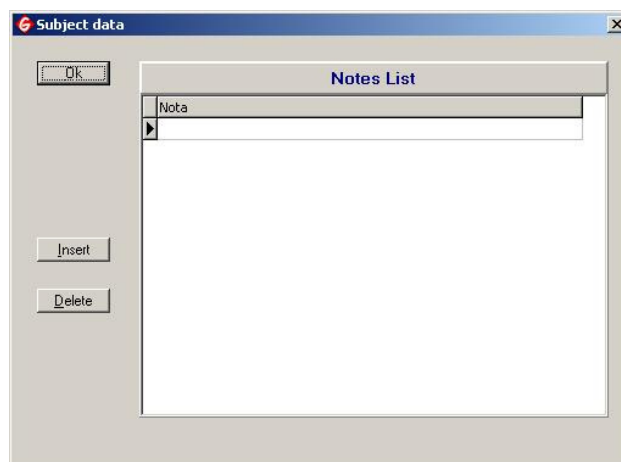
In *current physical activity*, type the data related to the *periodicity and duration*. Select the *intensity* description by clicking on the lateral down arrow.



To insert a new activity, select the icon with suspension points. Select INSERT and type the new information. Select OK to register the activity in the system. Select DELETE to delete the selected activity from the list.



In *notes*, select the note that you want by clicking on the lateral down arrow of the reference area and choose it from the list. To insert a new note, select the icon with suspension points. Select INSERT and type the new information. Select OK to register the note in the system. Select DELETE to delete the selected note from the list. Select OK to save the registrations performed and leave the ANAMNESIS MODULE or select CANCEL to cancel the actions performed.



Medical History

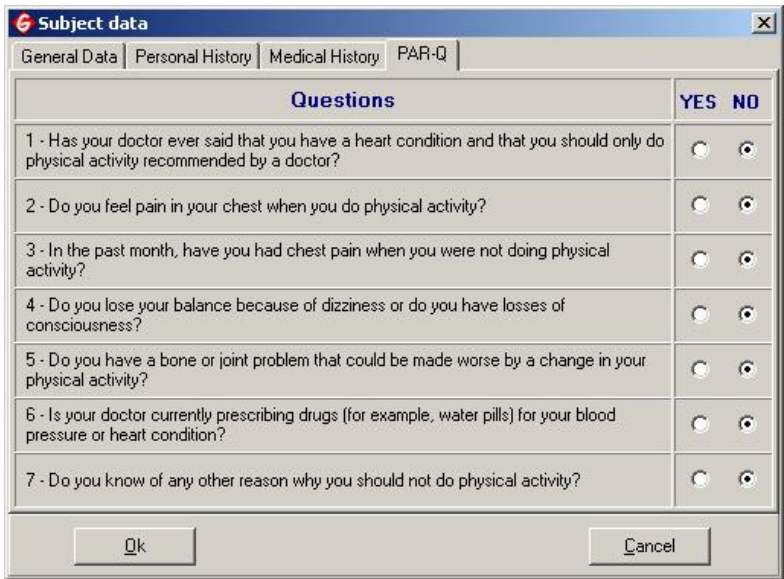
To include notes about the risk factors, select the desired information under *recorded medical history* and then choose either *personal* or *family*. To insert a new risk factor, select ADD and type the information. Select ADD once more so that the information inserted can be registered in the system.

The screenshot shows a software window titled "Subject data" with a standard Windows-style title bar (minimize, maximize, close buttons). Inside the window, there are four tabs: "General Data", "Personal History", "Medical History", and "PAR-Q". The "Medical History" tab is currently selected. The window is divided into several sections. On the left side, there are two stacked text input areas. The top one is labeled "Personal" and "History of past months", and the bottom one is labeled "Family" and "History of past months". Both contain placeholder text "?????????". On the right side, there is a larger section titled "Recorded Medical History" which contains a list box. The list box has a header "History" and one item "?????????". Below the list box are two buttons: "Add" and "Delete". At the bottom of the window, there are two buttons: "Ok" and "Cancel".

To delete information from the list, select it and click DELETE. A confirmation box will pop up. Select YES to continue or select NO to cancel the action. Then, select OK to save the registrations performed and leave the ANAMNESIS MODULE or select CANCEL to cancel the actions performed.

PAR-Q

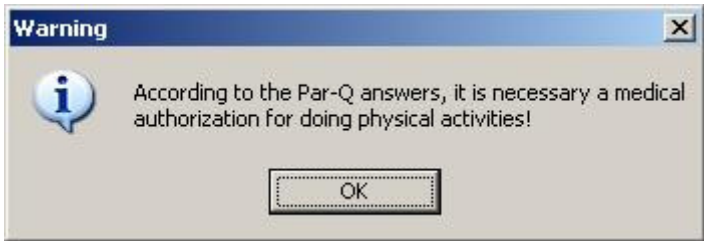
In order to answer the questions on the *PAR-Q* questionnaire, select the answer buttons YES or NO.



The screenshot shows a window titled "Subject data" with four tabs: "General Data", "Personal History", "Medical History", and "PAR-Q". The "PAR-Q" tab is selected. Below the tabs is a table with two columns: "Questions" and "YES NO". There are seven rows of questions, each with radio buttons for "YES" and "NO". At the bottom of the window are "Ok" and "Cancel" buttons.

Questions	YES	NO
1 - Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor?	<input type="radio"/>	<input type="radio"/>
2 - Do you feel pain in your chest when you do physical activity?	<input type="radio"/>	<input type="radio"/>
3 - In the past month, have you had chest pain when you were not doing physical activity?	<input type="radio"/>	<input type="radio"/>
4 - Do you lose your balance because of dizziness or do you have losses of consciousness?	<input type="radio"/>	<input type="radio"/>
5 - Do you have a bone or joint problem that could be made worse by a change in your physical activity?	<input type="radio"/>	<input type="radio"/>
6 - Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition?	<input type="radio"/>	<input type="radio"/>
7 - Do you know of any other reason why you should not do physical activity?	<input type="radio"/>	<input type="radio"/>

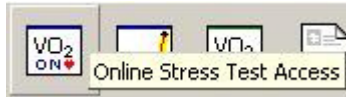
If you answered yes to any of the questions, the message box below will pop up. Select OK to return to PAR-Q. Select OK to save the registrations performed and leave the ANAMNESIS MODULE or select CANCEL to cancel the actions performed.



The screenshot shows a "Warning" message box with an information icon (i) and the text: "According to the Par-Q answers, it is necessary a medical authorization for doing physical activities!". There is an "OK" button at the bottom.

Online Stress Test

This module can be opened through the menu bar in MODULES → ONLINE STRESS TEST or by clicking on the icon ONLINE STRESS TEST ACCESS, below the menu bar.



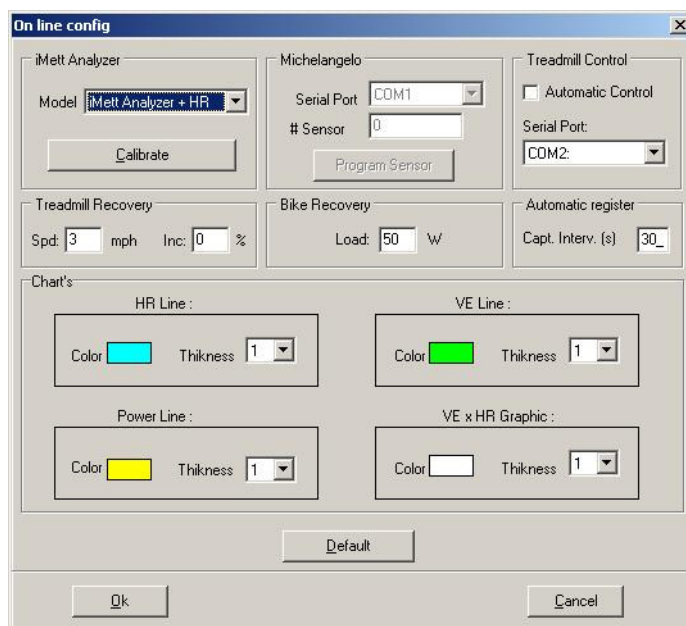
If the iMETT Analyzer is not connected to perform the stress test assessment, the message box below will pop up. Install the equipment and select OK.



The screen to begin the test will open.

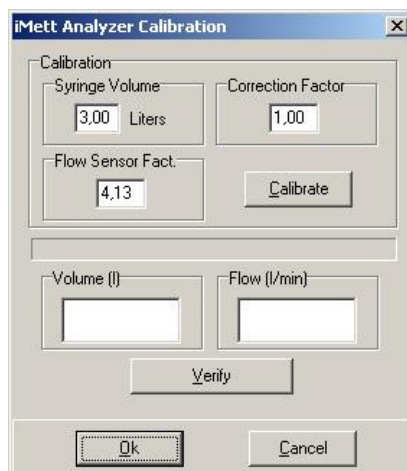


To setup, select CONFIGURATION or press F10 on your keyboard. The configuration box below will open. In *iMETT analyzer* you can set the mode of the analysis, clicking on the down arrow and then selecting the from the list (the default selection should be iMETT analyzer HR). To perform the calibration, select CALIBRATE.



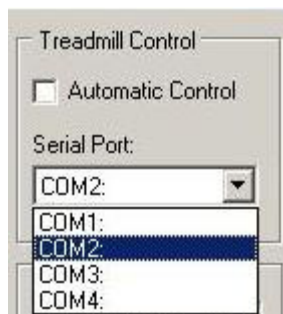
The 'On line config' dialog box contains several sections for configuring the iMett Analyzer. The 'iMett Analyzer' section has a 'Model' dropdown set to 'iMett Analyzer + HR' and a 'Calibrate' button. The 'Michelangelo' section includes a 'Serial Port' dropdown set to 'COM1', a '# Sensor' input set to '0', and a 'Program Sensor' button. The 'Treadmill Control' section has an 'Automatic Control' checkbox and a 'Serial Port' dropdown set to 'COM2'. The 'Treadmill Recovery' section has 'Spd' (3 mph) and 'Inc' (0 %) inputs. The 'Bike Recovery' section has a 'Load' input set to '50 W'. The 'Automatic register' section has a 'Capt. Interv. (s)' input set to '30'. The 'Chart's' section contains four line configuration boxes: 'HR Line' (Color: cyan, Thickness: 1), 'VE Line' (Color: green, Thickness: 1), 'Power Line' (Color: yellow, Thickness: 1), and 'VE x HR Graphic' (Color: white, Thickness: 1). At the bottom are 'Default', 'Ok', and 'Cancel' buttons.

Type the values for *syringe volume*, *correction factor* and *flow sensor fact* into their respective areas, then select CALIBRATE. Type the values related to the *volume* and *flow* in their respective areas and select VERIFY. Select OK to register the modifications and leave the configuration box. Select CANCEL to cancel the action and leave the configuration box.



The 'iMett Analyzer Calibration' dialog box is used for entering calibration data. It features a 'Calibration' section with 'Syringe Volume' (3.00 Liters), 'Correction Factor' (1.00), and 'Flow Sensor Fact.' (4.13). A 'Calibrate' button is located next to the 'Flow Sensor Fact.' input. Below this is a section for 'Volume (l)' and 'Flow (l/min)' with empty input fields. A 'Verify' button is positioned between these input fields. At the bottom are 'Ok' and 'Cancel' buttons.

In *treadmill control*, check the box next to *automatic control* to automatically select the system or click the down arrow for *serial port* and select a port from the list.



In *treadmill recovery*, *bike recovery* and *automatic register*, type the desired values in the reference areas.



In *charts* you can set the values of line thickness by selecting it from the list. To modify the colors of the lines, click on the area related to the color and select a color from the palette by clicking on the desired color. Select OK.



To restore the system to original information, select DEFAULT. To register the modifications and leave the ON LINE CONFIG box, select OK. To cancel the actions, select CANCEL.



To begin the test, select START or press the F1 key on your keyboard. To set the timer as zero, select ZERO or press the F4 key on your keyboard. To begin the recovery period, select RECOVERY or press the F12 key on your keyboard. The recovery must have a minimum period of 2 minutes to be validated. In order to save the captured data during the test, select REG. or press the F6 key on your keyboard. To finish the test and leave the module ONLINE STRESS TEST, select END.

Ventilatory Threshold

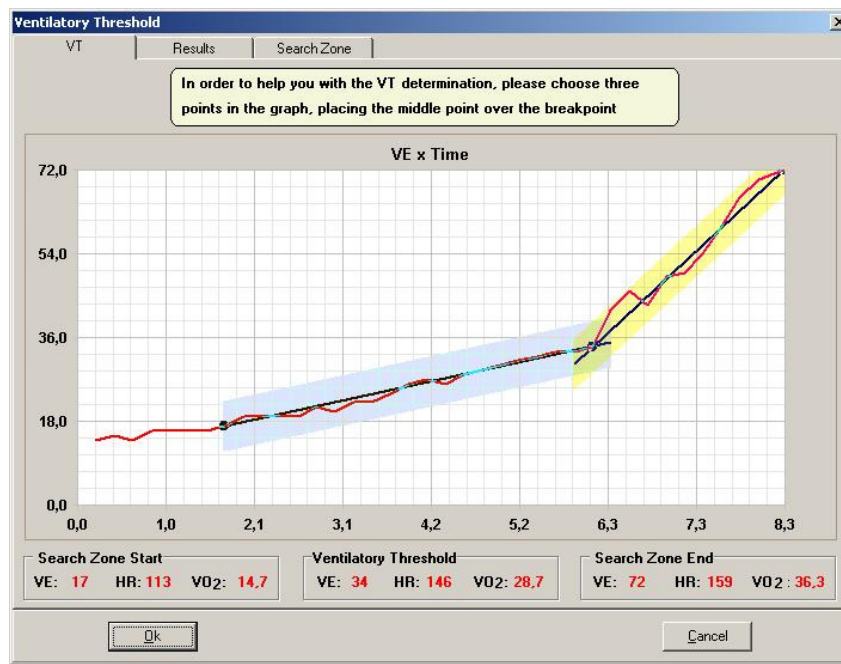
This module can be opened through the menu bar in MODULES → VENTILATORY THRESHOLD or by clicking on the icon VENTILATORY THRESHOLD DETERMINATION, above the menu bar:



In this module you will find three cards:

Ventilatory Threshold (Note: This is the old way VT was recorded. This will remain an option in the system, but the standard procedure is shown on page 51)

To set the *ventilatory threshold*, choose three points on the chart, placing the central point on the beginning of the hyperventilation. To do that, click the mouse on the locations you want to insert the points. The blue bar indicates the aerobic status and the yellow bar indicates the anaerobic status. The central point is the ventilatory threshold. The values of the *search zone start*, *ventilatory threshold* and *search zone end* are automatically inserted. Select OK to save the registrations performed and leave the VENTILATORY THRESHOLD card or select CANCEL to cancel the actions.



8. SEARCH ZONE

To insert new values, select the reference area and type the new information. Select OK to save the configurations and leave the configuration *environment* or select CANCEL to cancel the modifications and leave the configuration *environment*.

The screenshot shows a software window titled "Enviroment" with a close button (X) in the top right corner. The window contains several tabs: "General", "Body Composition", "Perimetry", "Postural Analysis", and "Stress Test". Below these tabs, there are three sub-tabs: "Somatochart", "Flexibility", and "Search Zone". The "Search Zone" tab is currently selected. It contains three sections: "Sedentary", "Active", and "Athlet". Each section has two input fields: "Start" and "End", both labeled "% of HR Max". The "Start" field in each section contains the value "55" and the "End" field contains the value "90". At the bottom of the window, there are two buttons: "Ok" and "Cancel".

Results

The values will be automatically inserted into the *results* card. To start the periodization program, select SEND DATA TO PERIODIZATION. The *periodization* program will open (check its instructions of use). Select OK to save the registrations performed and leave the VENTILATORY THRESHOLD card or select CANCEL to cancel the actions.

Ventilatory Threshold

VT Results Search Zone

Ventilatory Threshold Test Results

	HR (bpm)	Pred HR (bpm)	V02 (ml/kg/min)
Start	50	---	---
VT	146	---	28,7
Peak	159	202	36,3

2 min HR Recovery **111** bpm

Fitness Score **BELOW AVG**

% Peak to VT **79**

Send data to periodization

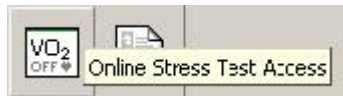
Ok Cancel

Search Zone

To edit the start and end values of heart rate percentile, click on the reference areas and type the values. Select OK to save the registrations performed and leave the VENTILATORY THRESHOLD card or select CANCEL to cancel the actions.

Offline Stress Test

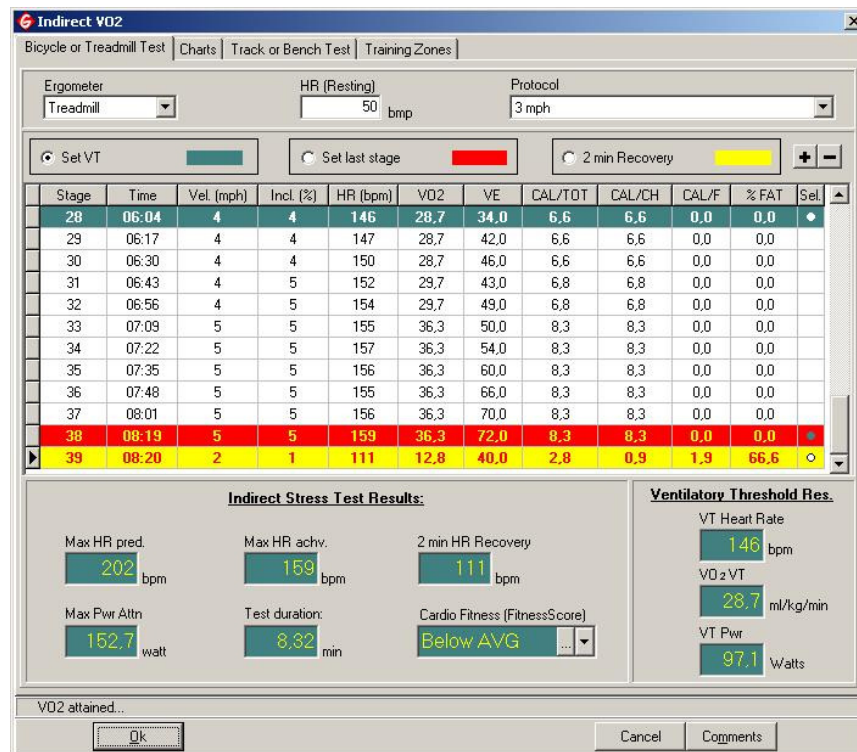
This module can be opened through the menu bar in MODULES → OFFLINE STRESS TEST or clicking on the icon ONLINE STRESS TEST ACCESS, below the menu bar.



In this module you will find 4 cards:

Bicycle or Treadmill Test

Select the *ergometer* and the *protocol* by clicking on the lateral down arrow and then select the one that you wish to use. Type in the reference area the value of the *heart rate*. To set the *VT (ventilatory threshold)*, click on its reference button and then select on the table the line of the stage that you want by clicking on the cell *Sel.* To *Set Last Stage*, click on its reference button and then select on the table the line of the stage that you want by clicking on the cell *Sel.* To *Set Recovery*, click on its reference button and then select on the table the line of the stage that you want by clicking on the cell *Sel.*



Indirect V02

Bicycle or Treadmill Test | Charts | Track or Bench Test | Training Zones

Ergometer: Treadmill | HR (Resting): 50 bpm | Protocol: 3 mph

☒ Set VT | ☐ Set last stage | ☐ 2 min Recovery

Stage	Time	Vel. (mph)	Incl. (%)	HR (bpm)	VO2	VE	CAL/TOT	CAL/CH	CAL/F	% FAT	Sel.
28	06:04	4	4	146	28.7	34.0	6.6	6.6	0.0	0.0	•
29	06:17	4	4	147	28.7	42.0	6.6	6.6	0.0	0.0	
30	06:30	4	4	150	28.7	46.0	6.6	6.6	0.0	0.0	
31	06:43	4	5	152	29.7	43.0	6.8	6.8	0.0	0.0	
32	06:56	4	5	154	29.7	49.0	6.8	6.8	0.0	0.0	
33	07:09	5	5	155	36.3	50.0	8.3	8.3	0.0	0.0	
34	07:22	5	5	157	36.3	54.0	8.3	8.3	0.0	0.0	
35	07:35	5	5	156	36.3	60.0	8.3	8.3	0.0	0.0	
36	07:48	5	5	155	36.3	66.0	8.3	8.3	0.0	0.0	
37	08:01	5	5	156	36.3	70.0	8.3	8.3	0.0	0.0	
38	08:19	5	5	159	36.3	72.0	8.3	8.3	0.0	0.0	•
39	08:20	2	1	111	12.8	40.0	2.8	0.9	1.9	66.6	○

Indirect Stress Test Results:

Max HR pred. 202 bpm | Max HR achv. 159 bpm | 2 min HR Recovery 111 bpm

Max Pwr Attn 152.7 watt | Test duration: 8.32 min | Cardio Fitness (FitnessScore) Below AVG

Ventilatory Threshold Res.

VT Heart Rate 146 bpm | VO2 VT 28.7 ml/kg/min | VT Pwr 97.1 Watts

VO2 attained... [Ok] [Cancel] [Comments]

To insert a stage, click on the icon with a + sign. The stage will be inserted in the last line of the numeric sequence. Type the new information. To delete a stage, select it from the list and click on the icon with a – sign. A confirmation box will appear.

The *indirect stress test results* are automatically inserted, apart from the *cardio fitness (fitness score)* that must be selected through the lateral down arrow of its area.

Indirect Stress Test Results:

Max HR pred. 202 bpm	Max HR achv. 159 bpm	2 min HR Recovery 111 bpm
Max Pwr Attn 152.7 watt	Test duration: 8.32 min	Cardio Fitness (FitnessScore) Below AVG ...▼

To analyze the tables of *fitness score*, select the icon with suspension points ... on the lateral part of the area *cardio fitness (fitness score)*. A box will open showing the following four cards: *cooper*, *american heart association*, *ventilatory threshold*, *fitness score*. Select the desired card and then select OK. To cancel the action, select CANCEL.

Cardiorespiratory Fitness

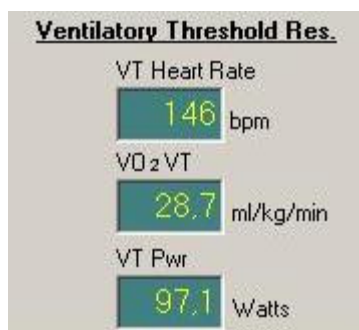
Cooper | American Heart Association | Ventilatory Threshold | **FitnessScore**

MEN

Age	0 - 20	20 - 29	30 - 39	40 - 49	50 - 99
POOR	0 - 24	0 - 22	0 - 19	0 - 17	0 - 15
Below AVG	25 - 33	23 - 30	20 - 26	18 - 24	16 - 22
Average	34 - 42	31 - 38	27 - 35	25 - 33	23 - 30
Good	43 - 52	39 - 48	36 - 44	34 - 42	31 - 40
Excellent	> 52	> 48	> 44	> 42	> 40

Ok Cancel

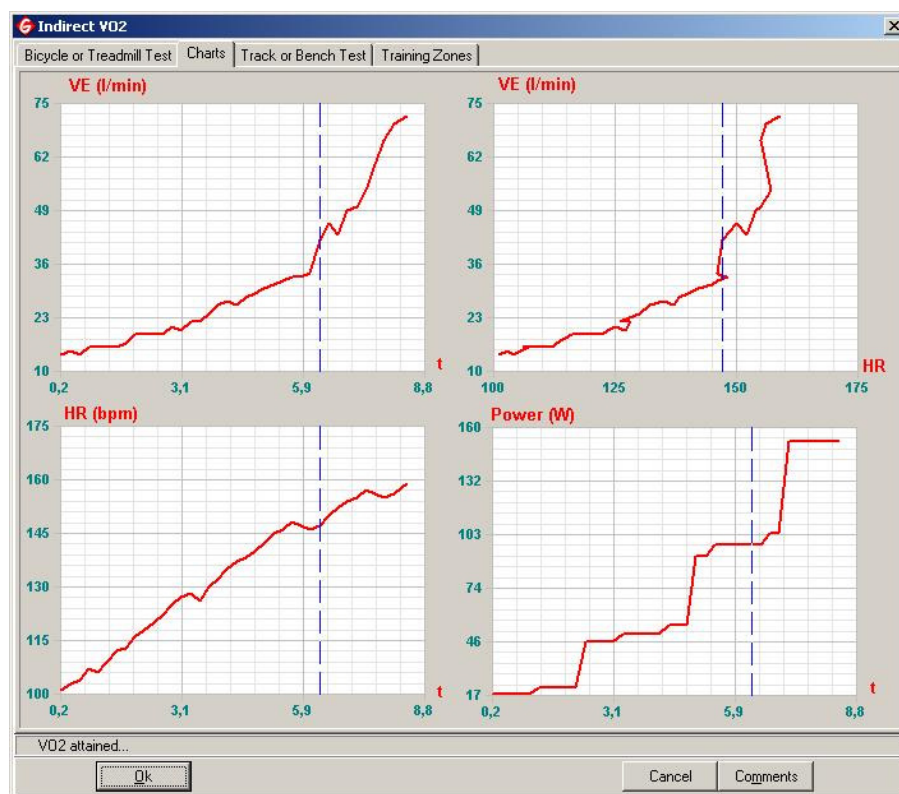
In *ventilatory threshold res.*, the data will be automatically inserted.



To insert a comment, select COMMENTS. Select OK to register the information and leave the module. Select CANCEL to cancel the actions.

Charts

To adjust the threshold on the chart, simply hold down the CTRL key, click on the blue line and drag it to the desired location.



Send Data to Periodization

In *ventilatory threshold test results*, the values are automatically inserted. To start the periodization program, click on the icon SEND DATA TO PERIODIZATION. The **periodization** program will open (check its instructions for use). Select OK to save the registrations performed and leave the VENTILATORY THRESHOLD card or select CANCEL to cancel the actions.

The screenshot shows a software window titled "Indirect V02" with a menu bar containing "Bicycle or Treadmill Test", "Charts", "Send data to periodization", "Track or Bench Test", and "Training Zones". The main area is titled "Ventilatory Threshold Test Results" and contains a table with the following data:


	HR (bpm)	Pred HR (bpm)	V02 (ml/kg/min)
Start	50	--	--
VT	82	--	17,7
Peak	95	202	19,6

Below the table, three metrics are displayed:

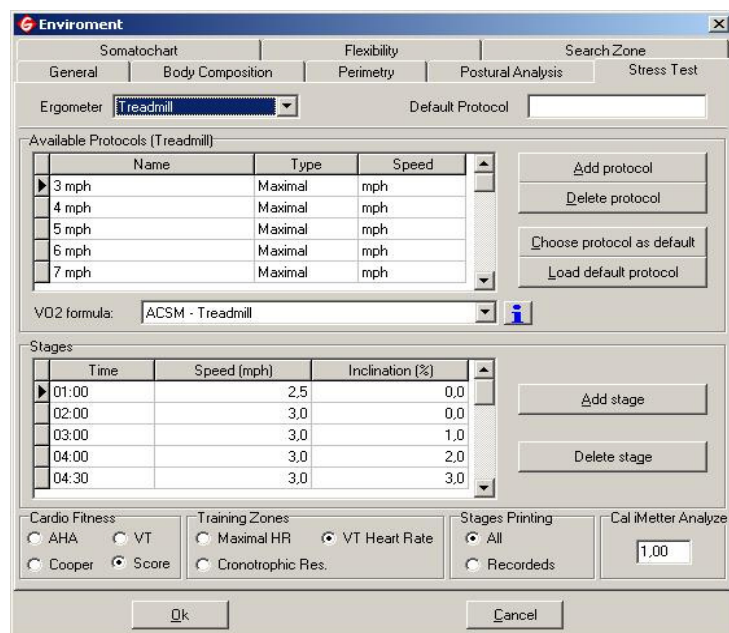
- 2 min HR Recovery: 115 bpm
- Fitness Score: POOR
- % Peak to VT: 90

A button labeled "Send data to periodization" is located below these metrics. At the bottom of the window, there is a status bar with the text "V02 attained..." and three buttons: "Ok", "Cancel", and "Comments".

Fitness Test

Choose the *ergometer* by clicking on the lateral down arrow and select the preferred ergometer. To add a protocol, select ADD PROTOCOL and type the new information in its area. To delete a protocol, select it from the list and click DELETE PROTOCOL. To classify a protocol as standard, select it from the list and click CHOOSE PROTOCOL AS DEFAULT. Select the VO₂ Formula by clicking on the lateral down arrow of its reference area. To view the description of the formulas, select the icon , beside the area VO₂ formula.

In the box related to the *stages* you can set values for *time*, *speed (mph)* and *inclination*, by selecting the reference area and typing the desired values. To insert a stage, select ADD STAGE. To delete a stage, select it from the reference box and select DELETE STAGE. Select the buttons related to the *cardio fitness*, *training zones*, and *stages printing* that you wish to use. In the area *cal iMetter analyze* click on the reference area and type the value you want. Select OK to save the configurations and leave the configuration *environment* or select CANCEL to cancel the modifications and leave the configuration *environment*.



Name	Type	Speed
3 mph	Maximal	mph
4 mph	Maximal	mph
5 mph	Maximal	mph
6 mph	Maximal	mph
7 mph	Maximal	mph

Time	Speed (mph)	Inclination (%)
01:00	2.5	0.0
02:00	3.0	0.0
03:00	3.0	1.0
04:00	3.0	2.0
04:30	3.0	3.0

To return to the default configuration of the protocols, select LOAD DEFAULT PROTOCOL. A confirmation box will pop up. Select YES to confirm or select NO to cancel the action.

Training Zones

In *training zones*, the values can be inserted by clicking and typing in the reference areas.

To insert a line, click on the icon INSERT LINE. A line will appear at the end of the list. Type the new information.

Description	Inf. Perc. (%)	Sup. Perc. (%)	Inf. HR (bpm)	Sup HR (bpm)
Atividade Moderada	50	50	126	126
Controle de Peso	60	70	141	156
Aeróbia	70	80	156	172
Limiar Anaeróbio	80	90	172	187
Esforço Máximo	90	100	187	202

Insert line Delete Line Reload Default Zones Save zones as default

Training zones determination way

Warning - The maximum HR proposed surpass the maximum HR attained during the test!

☐ Use the Maximal HR ☒ Use the Cronotrophic Reserve ☐ Use the VT HR

HR (Resting) 50

Enter the resting HR in case of using the Cronotrophic Reserve for training zones calculation.

Uncalculated V02

Ok Cancel Comments

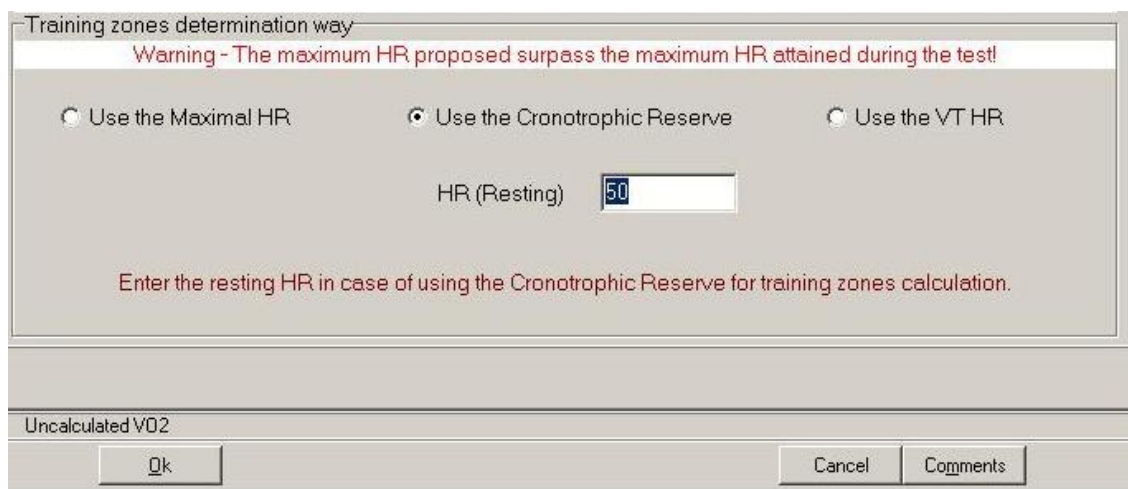
To delete a line, click on the icon DELETE LINE. A confirmation box will pop up. Select YES to continue deleting and select NO to cancel the action.

To restore the default configuration, click on the icon RELOAD DEFAULT ZONES. The confirmation box below will pop up. Select YES to substitute the current zones or NO to cancel the action.

To save the new information as default, select SAVE ZONES AS DEFAULT.



In *training zones determination way*, choose between using the *maximal HR (Heart Rate)*; the *cronotrophic reserve* or the *VT HR (Ventilatory Threshold Heart Rate)* by selecting one of the reference buttons. In *HEART RATE (Resting)*, click and type the desired value. Select OK to register the information and leave the module. Select CANCEL to cancel the actions.



Track or Bench Test

Type the value of the *HEART RATE (resting)* on the reference area and select the *test type* from the drop down menu. Under *field tests*, type in required information in the *distance* and *HR* fields. Under *field tests*, type in required information in the *distance* and *HR* fields.

The screenshot shows the 'Indirect VO2' software window with the 'Track or Bench Test' tab selected. The interface is divided into several sections:

- Top Section:** Contains 'HR (Resting)' with a value of 50 bpm and a 'Test Type' dropdown menu.
- Field Tests:** Contains two input fields: 'Distance (m)' and 'HR (bpm)'.
- Bench Tests:** Includes a '(Katch_McArdle, 1984)' reference, a 'Chronometer' field with a colon symbol, a 'Bench Height (cm)' field, a 'Metronome sound' checkbox (checked), and an 'HR (bpm)' field.
- Buttons:** 'Start' and 'Stop' buttons are located below the bench test fields.
- Results:** Displays calculated values: 'Max HR pred.' (202 bpm), 'V_Q max predict.' (58.6 ml/kg/min), 'FAI' (46.16 %), 'VT HR' (172 bpm), and 'VO₂ max attained' (31.6 ml/kg/min). It also includes a 'Fitness(FitnessScore)' dropdown menu set to 'Below AVG'.
- Bottom Section:** Labeled 'VO2 attained...' with 'Ok', 'Cancel', and 'Comments' buttons.

In *bench test*, click and type in the values related to the *chronometer*, *bench height (cm)* and *HEART RATE (BPM)*. If you want to activate the *metronome sound*, click on its reference button.

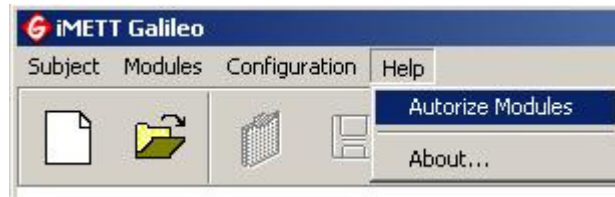
To begin the test, select **START**. The *chronometer* will be activated in decreasing order and will stop when the chronometer shows zero. To stop the test, at any time, select **STOP**.

ADDITIONAL INFORMATION

PURCHASING OPTIONAL MODULES
PRINTING
PATENTS

Purchasing Optional Modules

iMETT Galileo allows the user to acquire optional modules to use on the system. To do so, select **HELP → AUTHORIZE MODULES**, through the menu bar.



Contact WOODWAY (1-800-WOODWAY or info@woodway.com) to order the enabling modules and receive the security key number. Select **ENABLE** beside the module that you want to acquire.

A screenshot of the 'Authorize Modules' dialog box. The dialog has a title bar 'Authorize Modules' and a close button. The main area has a title 'Authorize Modules' and a 'Key ID' field containing '44408 - 27624'. Below this is a table with two columns: 'Module' and 'Status'. The table lists several modules, most of which are 'DISABLED' in red text, with a green checkmark and 'Enable' button to the right. Two modules, 'Stress Test' and 'Periodization', are 'ENABLED' in blue text. At the bottom, there is a 'Key Status' field containing 'Key connected and valid.' and an 'Exit' button.

Module	Status
Body Composition:	DISABLED
Girths:	DISABLED
Muscle Endurance:	DISABLED
Somatotype:	DISABLED
Flexibility Angles:	DISABLED
Sit and Reach:	DISABLED
Postural Analysis:	DISABLED
Stress Test	ENABLED
Periodization	ENABLED

Printing

To begin printing, select SUBJECT → PRINT or click on the PRINT icon on the toolbar.

When printing begins, the box below will pop up. You will only be able to print one report at a time. Select the reports that you want to print by clicking on their reference buttons. Select OK to continue printing or select CANCEL to cancel the printing.

The image shows a 'Print' dialog box with a title bar containing a red 'G' icon and the word 'Print'. The dialog is organized into several sections, each with a title and a list of items with checkboxes. The 'Generic Reports' section has three items: 'Subject data' (checked), 'Assessment comments' (unchecked), and 'Par-Q' (checked). The 'Body Composition' section has four items: 'Composition Result' (unchecked), 'Composition Parameters' (unchecked), 'Body Composition Evolution' (unchecked), and 'BodyCard' (unchecked). The 'Muscle Endurance' section has one item: 'Results' (unchecked). The 'Postural Analysis' section has one item: 'Results' (unchecked). The 'Somatotype' section has one item: 'Results' (unchecked). The 'Perimetry' section has two items: 'Results' (unchecked) and 'Evolution' (unchecked). The 'Flexibility - Sit-and-Reach' section has one item: 'Results' (unchecked). The 'Flexibility - Angles' section has two items: 'Results' (unchecked) and 'Classification Interval' (unchecked). The 'VO2 Analysis' section has three items: 'Results' (checked), 'Records' (checked), and 'Charts' (checked). The 'Periodization' section has one item: 'Results' (unchecked). At the bottom of the dialog are two buttons: 'Ok' and 'Cancel'.

Section	Item	Selected
Generic Reports	Subject data	Yes
	Assessment comments	No
	Par-Q	Yes
Body Composition	Composition Result	No
	Composition Parameters	No
	Body Composition Evolution	No
	BodyCard	No
Muscle Endurance	Results	No
Postural Analysis	Results	No
Somatotype	Results	No
Perimetry	Results	No
	Evolution	No
Flexibility - Sit-and-Reach	Results	No
Flexibility - Angles	Results	No
	Classification Interval	No
VO2 Analysis	Results	Yes
	Records	Yes
	Charts	Yes
Periodization	Results	No

Patents

MICROMED®

POLAR®

Section 2: Periodization



INSTALLING THE PERIODIZATION PROGRAM

Periodization was designed to assist the personal trainer in prescribing exercise programs for clients and club members.

NOTE: This program was not designed for medical purposes.

Insert the CD provided with the iMETT into your CD-ROM drive and follow the instructions.

1. The first step is to choose the desired language. This can be done at the screen below. To cancel this program, click CANCEL.
2. Click OK.
3. Choose where you would like the file to be located. You can either use the default location or click the BROWSE button to choose your own. Click NEXT when the desired location is chosen.
4. Choose the setup type that best suits your needs (Note: Typical is recommended).
5. Click OK.
6. Wait for installation to complete. If you wish to abort the installation, click on CANCEL.
7. A status window will appear letting you know it is installing. Wait until the HASP drive is installed.
8. Once installation is complete, click FINISH.

NOTE: The dongle provided with the system must be in your computer's USB port in order for the program to open.

USING PERIODIZATION FOR THE FIRST TIME

TOOL BAR
PERIODIZATION MENU

The periodization program can be opened by double clicking on the icon on your desktop.
If the dongle is not placed in the USB port, the warning message bellow will appear:



Tool Bar

1. Prescription

NEW: Open a new prescription.

OPEN: Open an old prescription.

SAVE: Save a new prescription to the database.

CLOSE: Close a prescription, returning to the beginning.

PRINTING CONFIGURATION: Configure the printing of prescription.

PRINT: Print the prescription.

EXIT: Close the program.

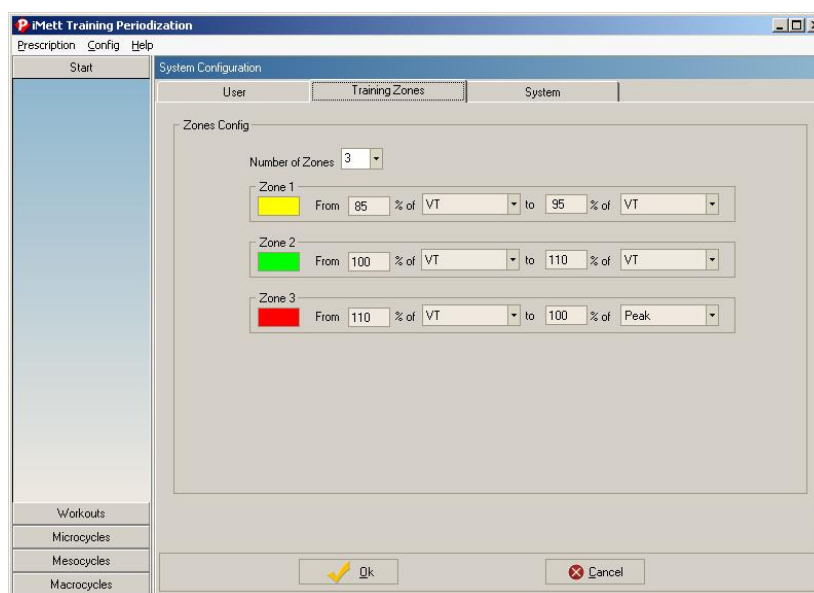
2. Configuration

Note: Configuration is critical prior to the first exercise prescription.

Edit fields to represent facility / trainer information. To insert or change the logo, click on the indicated key. Delete the current logo by clicking on CLEAR LOGO. Click OK to save. Click CANCEL to ignore changes. *Logo must be in bitmap format and no larger than 600x900.*

TRAINING ZONES

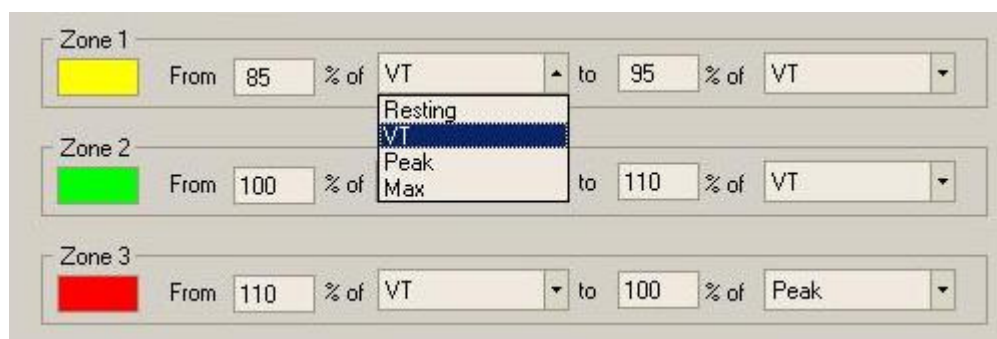
NOTE: Any changes in the training zones during program use will automatically be calculated in the previous prescriptions issued. **Note:** *The minimum percentage has to always be less than the heart rate maximum.*




To configure the number of training zones, click on the field NUMBER OF ZONES and choose the desired number.

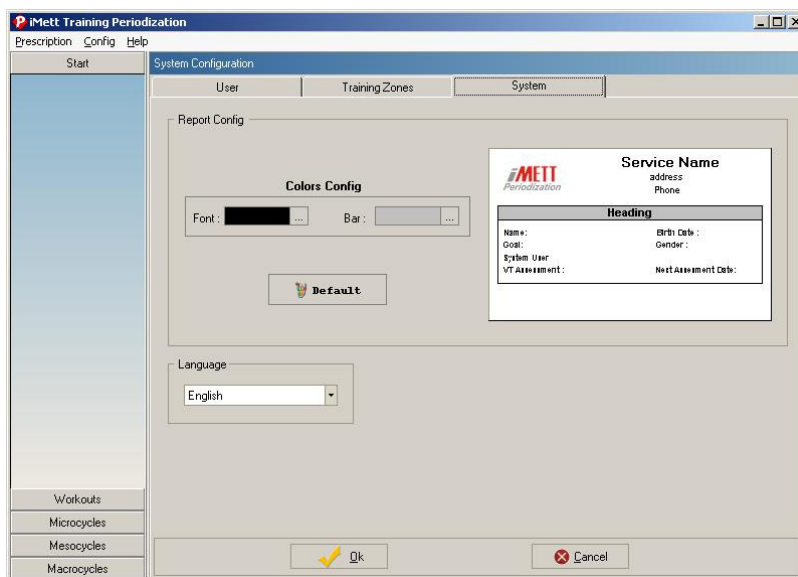
Creating new training zones:

- Click on the field linked to the percentage and type the new values.
- Click on the *heart rate* field and select one of the four options. To save, click OK. To exit, click CANCEL.



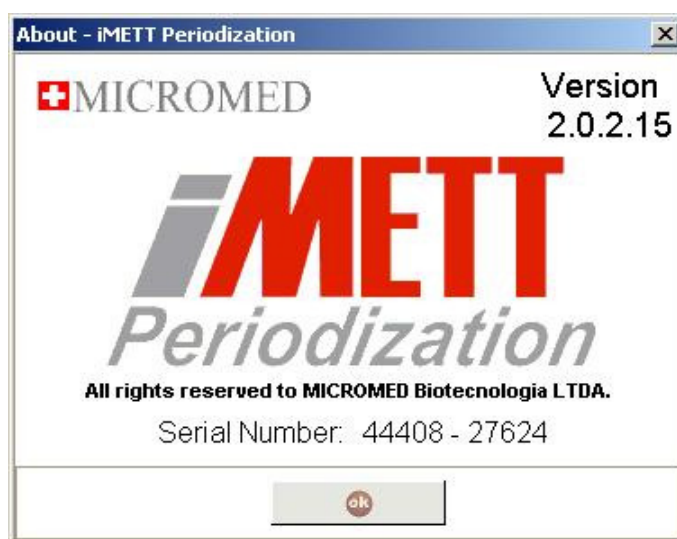
SETTING THE SYSTEM

To change the bar colors and font, click on the field indicated  then save by clicking once on the key OK. This is also where you can make a change to the language, if desired.



1. HELP – Program information, Serial Number, Version and Copyright.

NOTE: The serial number listed is the same as on the dongle. This number is required for all upgrades, changes and additional software options.



Periodization Menu

Start



By clicking on this icon you may choose to start a new prescription or edit an existing prescription.

Session



This button will display a list of daily exercises that have been prescribed. The values can be organized as once daily (shown below) or more frequently if desired.

Microcycles



This icon will display a list of sessions based on options assembled in the last 1-2 months.

Mesocycles / Macrocycles




The mesocycles button will display a list of sessions registered in the last 1-2 months, while the macrocycles are those assembled in the last eight (8) months or less.

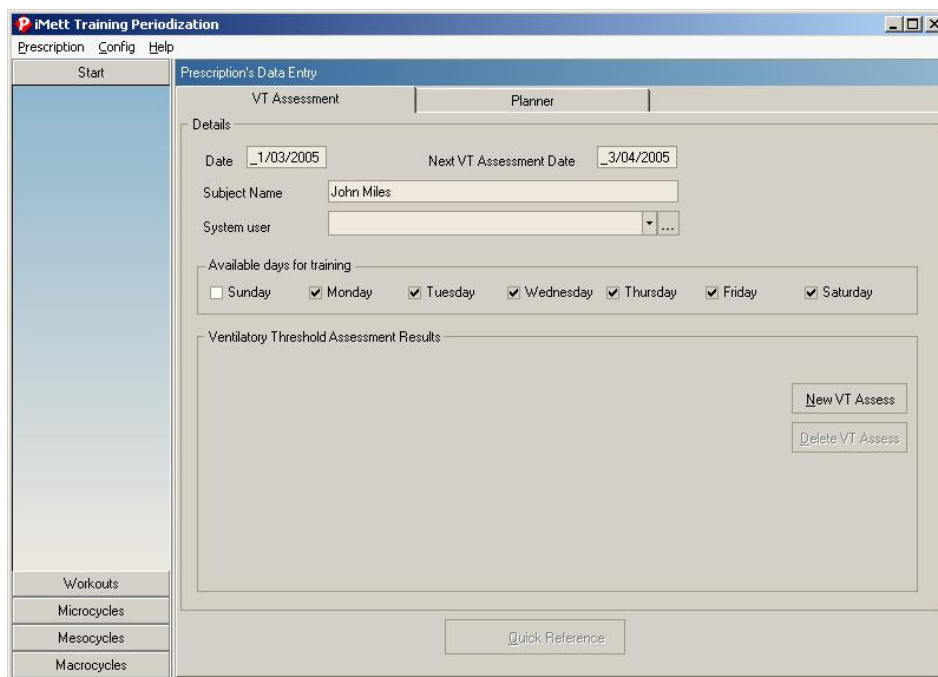
PRESCRIBING EXERCISE

Click NEW PROGRAM PRESCRIPTION to begin a new exercise prescription.

The form SELECT SUBJECT will open. Click NEW SUBJECT to add a new subject.

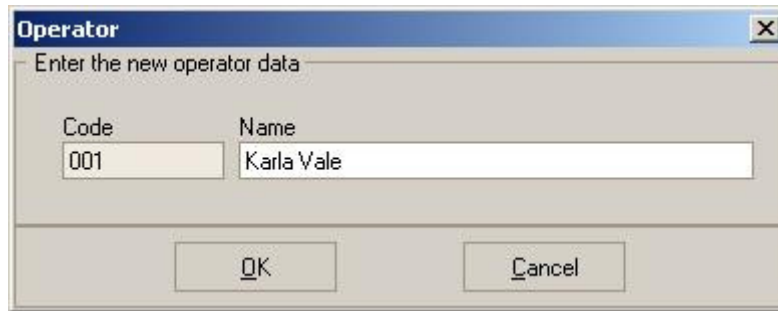
Insert data for the new subject into the proper fields. Click on SAVE to save or CANCEL to exit.

Click on SAVE & NEW PRESCRIPTION. A form for the data for the new prescription will appear. In the field SUBJECT NAME enter the client's name. In the field SYSTEM USER choose the name of the trainer prescribing the exercise. If the name is not in the system library, click on the  icon and insert a new name.

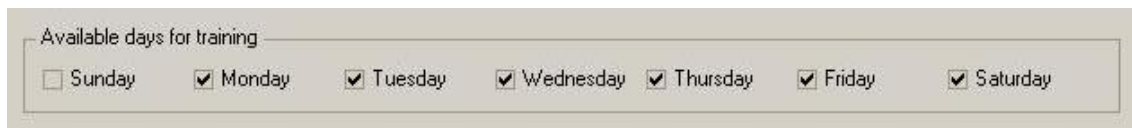


Click NEW to type the subject data.

Type the required information and Click OK to save, to cancel click CANCEL.

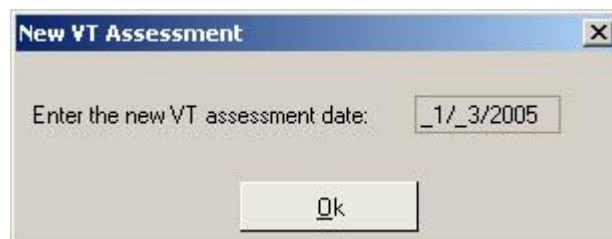
A dialog box titled "Operator" with a close button (X) in the top right corner. The text "Enter the new operator data" is displayed. Below this, there are two input fields: "Code" with the value "001" and "Name" with the value "Karla Vale". At the bottom, there are two buttons: "OK" and "Cancel".

On the tool bar, select the client's preferred workout days. The system will then automatically prescribe exercises for the days chosen.

A horizontal panel titled "Available days for training". It contains seven checkboxes for the days of the week: Sunday (unchecked), Monday (checked), Tuesday (checked), Wednesday (checked), Thursday (checked), Friday (checked), and Saturday (checked).

Click on NEW VT ASSESSMENT to open the date of the evaluation.

The message below will appear suggesting the actual date. Click OK to proceed.

A dialog box titled "New VT Assessment" with a close button (X) in the top right corner. The text "Enter the new VT assessment date:" is displayed. To the right of this text is a date input field containing the value "_1/_3/2005". At the bottom, there is a single button labeled "Ok".

Type in the necessary data from the test performed on the subject (***this information will automatically be generated from the Galileo software if an iMETT test was run***).

Ventilatory Threshold Assessment Results

1/3/2005

	Act HR (bpm)	Pred HR (bpm)	Act VO2 (ml/kg/min)
Start	90	--	--
VT	200	--	40
Peak	187	180	60

2 minute Recovery HR: 135 bpm

Fitness Score: EXCELENT


% Peak to VT: 66

Goal: [] ...

New VT Assess

Delete VT Assess

Quick Reference

If the subject is not listed click the  to insert a new subject and proceed.

Insert the subject's goal then click OK to proceed. To cancel, click CANCEL. This will bring you back to the NEW SUBJECT window. If you wish to add more subjects, do so here.

Goals Library Maintenance

Enter the new goal text:

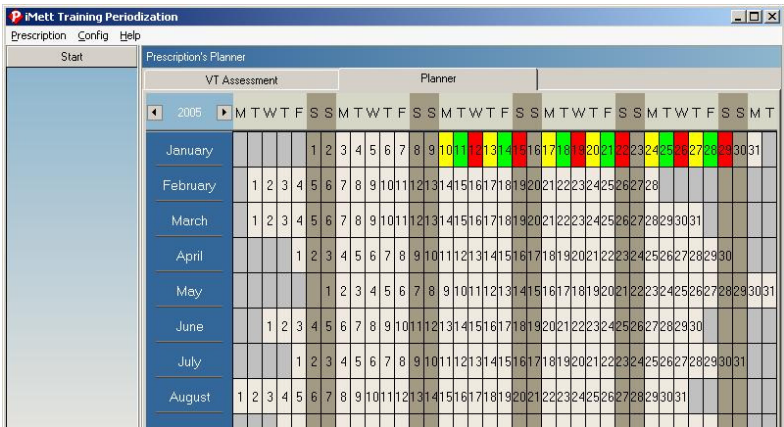
Loose weight

OK Cancel

After data is entered and the goal is selected, click on QUICK REFERENCE.

Upon selecting QUICK REFERENCE, the agenda window will open. Based on the data entered for the subject, a program will be recommended from the following categories: LOW CARDIO PROGRAM, MEDIUM CARDIO PROGRAM, HIGH CARDIO PROGRAM and RECOVERY PROGRAM. Click on OK to proceed with prescription or CANCEL.

To select the workout days, click on the date that you wish to begin your program. The program will distribute the sessions based on the days indicated by the subject. Each type of session will be represented by colors.



If a workout is generated on a day of the week other than the days previously indicated by the subject, a warning message will appear indicating this was not a previous preference. To proceed and arrange a workout on that day, click OK. To cancel this action click CANCEL.

To obtain the specific details on any of the selected WORKOUT PLANS, double click the chosen day. This will provide you with a detailed description of the session intensity based on the information from the test. Each column represents the number of intervals in the session. The top of the column indicates the recommended heart rate range during that interval. This is determined by test results. To return to the overall summary, click on OK.

iMett Training Periodization

Prescription Config Help

Start

Exercise Workout Planning

Workout Details

Workout Date: 1/12/2005

Workout Name: Interval Day 6

of Intervals: 7 Workout Color: Red

Notes: Repeat the 5 min of work and recovery based on client's time frame that day

View VT Assessment Data

Training Zones

- 170 bpm to 186 bpm
- 186 bpm to 186 bpm
- 186 bpm to 187 bpm

Workout Intervals

Interval	Duration	Initial HR (bpm)	Final HR (bpm)
Warm-up	00:05:00	170	186
	00:01:00	186	187
	00:01:00	186	186
	00:01:00	186	187
	00:01:00	186	186
	00:01:00	186	187
Cooldown	00:05:00	170	186

Workout Template

Warm-up						Cooldown
00:05:00	00:01:00	00:01:00	00:01:00	00:01:00	00:01:00	00:05:00

Workouts

Microcycles

Mesocycles

Macrocycles

Ok

To review the data, click on VIEW VT ASSESSMENT DATA.

EDITING AND PRINTING

EDITING SUBJECT DATA
EDITING A PRESCRIPTION
PRINTING

Click on EDIT EXISTING PROGRAM to edit an existing prescription.

Editing Subject Data

To edit subject data already in the database, select from the list of subject names and click on EDIT DATA.

Type the new information into the proper fields and click on the SAVE icon. If you want to save this information and move into a new prescription, click SAVE & NEW PRESCRIPTION.

To delete a subject, select the name from the list and click on DELETE SUBJECT. A message will pop up to confirm or cancel the request.


Editing a Prescription

In order to edit an existing prescription, select it from the list and click EDIT DATA.

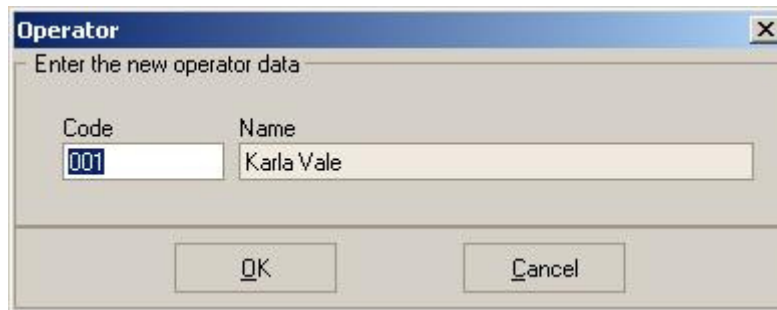
Enter desired information.

The screenshot shows the 'iMett Training Periodization' software window. The 'Prescription's Data Entry' tab is active, with sub-tabs for 'VT Assessment' and 'Planner'. The 'Details' section includes fields for 'Date' (1/3/2005), 'Next VT Assessment Date' (3/4/2005), 'Subject Name' (John Miles), and 'System user' (Karla Vale). The 'Available days for training' section shows checkboxes for Sunday (unchecked) and Monday through Saturday (checked). The 'Ventilatory Threshold Assessment Results' section displays a table for the date 1/3/2005. The table has columns for 'Act HR (bpm)', 'Pred HR (bpm)', and 'Act VO2 (ml/kg/min)'. The rows are 'Start', 'VT', and 'Peak'. The 'Peak' row is highlighted. Below the table, there are fields for '2 minute Recovery HR' (135 bpm), 'Fitness Score' (EXCELENT), and '% Peak to VT' (66). There are also buttons for 'New VT Assess' and 'Delete VT Assess'. A 'Goal' field is set to 'Loose weight'. A 'Quick Reference' button is at the bottom.

	Act HR (bpm)	Pred HR (bpm)	Act VO2 (ml/kg/min)
Start	90	--	--
VT	200	--	40.0
Peak	187	180	60.0


To edit or delete a user from the library, click in the icon  and select the name you wish to delete. To edit the data, click on EDIT. To delete click on DELETE.

If you choose EDIT, the operator window will appear. Type in the new information and press OK.

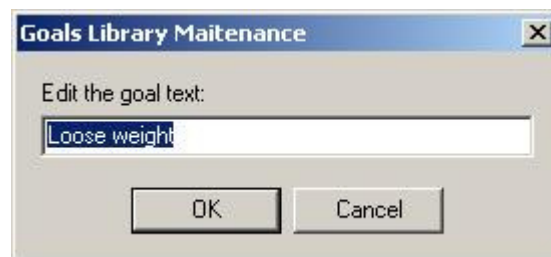
A dialog box titled "Operator" with a close button (X) in the top right corner. The main text inside says "Enter the new operator data". Below this, there are two input fields: "Code" and "Name". The "Code" field contains the text "001" and is highlighted with a blue selection bar. The "Name" field contains the text "Karla Vale". At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

In order to insert a new prescription, choose the NEW EVALUATION icon.

To exclude an evaluation, click on the icon DELETE. This will automatically delete the highlighted evaluation.

To delete or edit a goal from the system library, click on the icon  and select NEW, EDIT or DELETE.

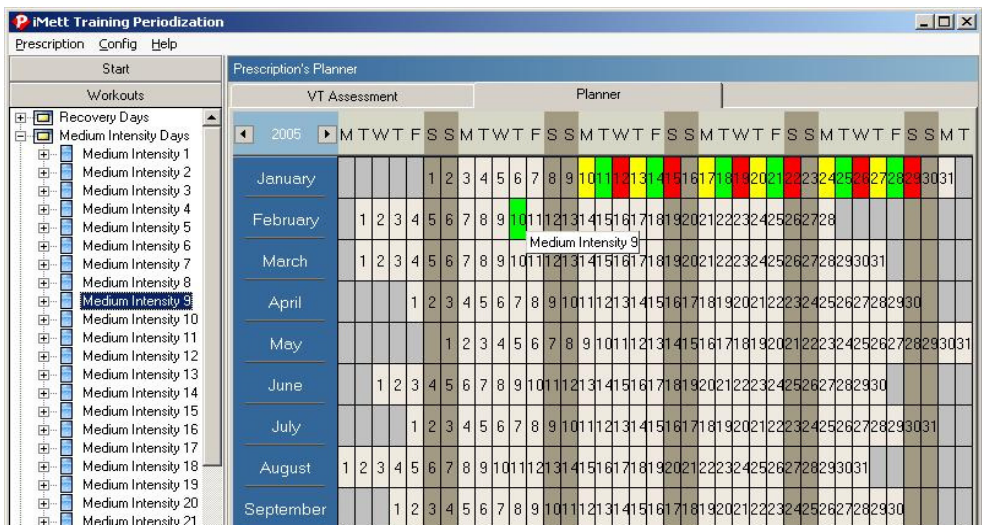
If you choose EDIT, the GOALS LIBRARY MAINTENANCE window will open. Type a new goal and click on OK to confirm or CANCEL to ignore.

A dialog box titled "Goals Library Maintenance" with a close button (X) in the top right corner. The main text inside says "Edit the goal text:". Below this, there is a single input field containing the text "Loose weight". At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

If you choose DELETE, a confirmation window will open to confirm or cancel your decision.

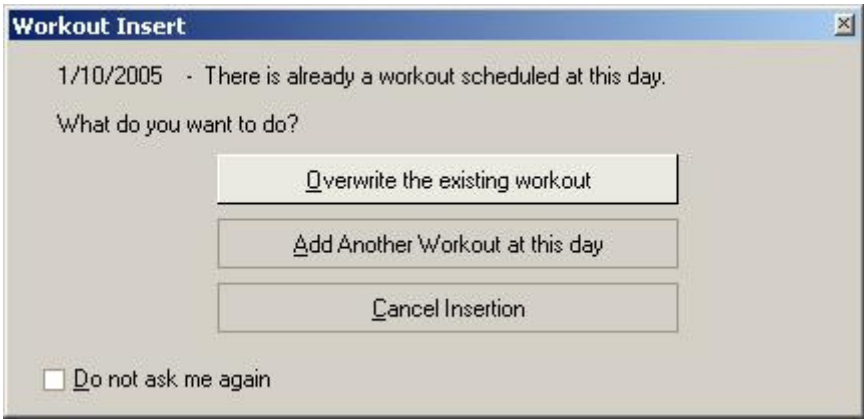
INSERTING A SESSION MANUALLY

To insert a session manually, click on a session on the left side of the menu and drag to the desired date.



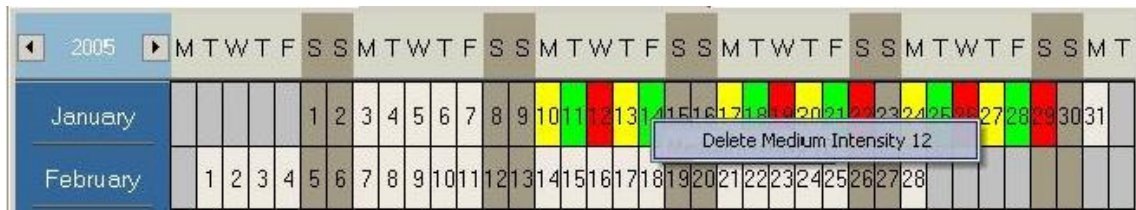
PRESCRIBING SESSIONS ON THE SAME DATE

An exercise can be prescribed more than once on the same date. If you would like to do so, click on the session and drag it into the desired date. The WORKOUT INSERT window will appear to give you options to proceed.



DELETING A SESSION

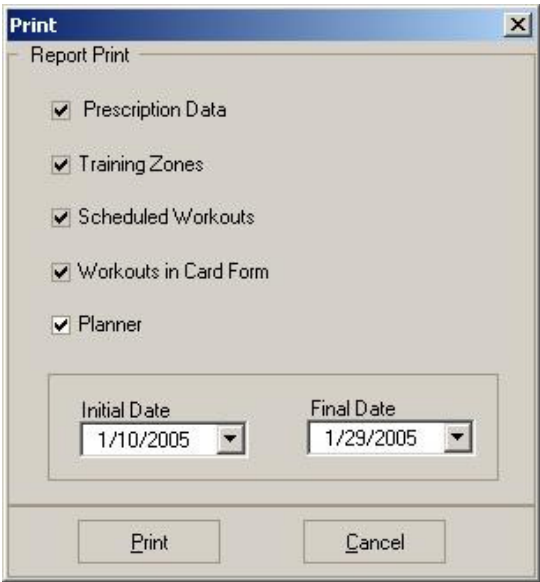
To delete a session, right click on the desired date and select DELETE.



If there is more than one session on the same date, follow the same procedure after choosing which you want to delete.

Printing

Upon choosing PRINT from the menu bar, the window below will open. From this window you can configure the printing of the document.



The user can now choose the desired forms to be printed. Select each form by clicking on the box on the left side. Click on the PRINT icon to print or CANCEL to ignore.

TYPES OF PRINTING

PRESCRIPTION DATA

Service Name

Service Address

66-888-9988

Prescription Data	
Name: John Miles	Birth Date: 10/20/1964
Goal: Loose weight	Gender: Male
System User: KarlaVale	Next Assessment Date: 3/4/2005
Periodization Date: 1/3/2005	

TRAINING ZONES

Service Name

Service Address

66-888-9988

Training Zones			
	Zone Color	Initial HR (bpm)	Final HR (bpm)
	Yellow	170	185
	Green	185	185
	Red	185	187

SCHEDULED WORKOUTS

Printing one session per page

Service Name

Service Address

66-888-9988

Medium Intensity 7						
Note:						
170 - 178 bpm	185 - 185 bpm	170 - 185 bpm	185 - 185 bpm	170 - 185 bpm	185 - 185 bpm	170 - 178 bpm
Warm-up						Cooldown
00:05:00	00:05:00	00:00:30	00:05:00	00:00:30	00:05:00	00:05:00

Printing more than one session per page:

Note: Sessions can also be printed in business card format. In this format, the same options are available (1-10 workouts per page.)

CARD FORM

PLANNER

Section 3:

Supporting Documents

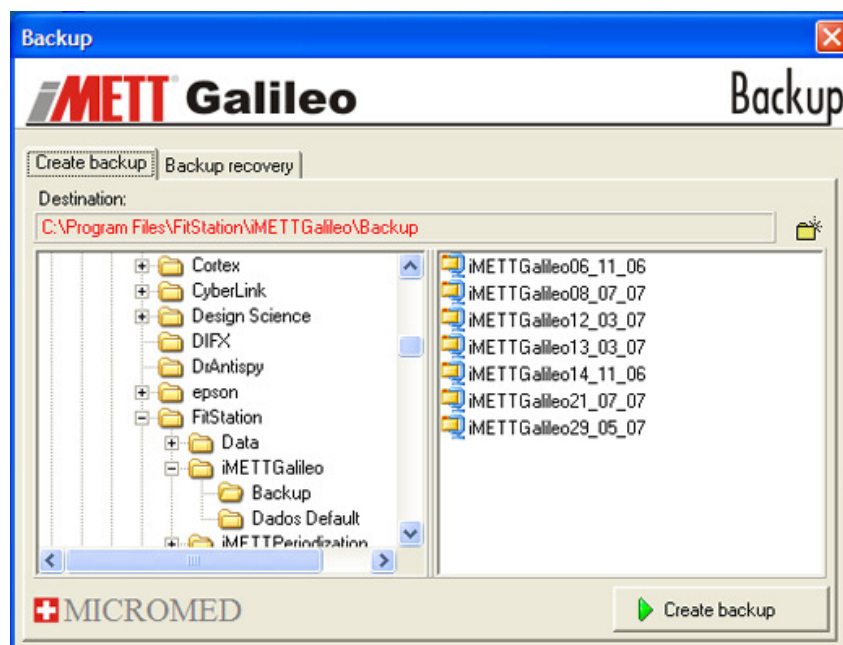
OUT OF INDEX ERROR

Out of Index Error

This is usually caused by the software not being shut down properly or because of a power surge. The software has a built-in repair system to correct this error in just a few minutes.

STEPS TO REPAIR OUT OF INDEX PROBLEM:

1. Back-up data base (this should be done weekly or after a large group of tests performed in one day).
 - a. Close all programs so you are back at the Windows screen.
 - b. Select start.
 - c. Select all programs.
 - d. Select iMETT Galileo.
 - e. Select Backup.
 - f. Select the create backup button.
 - i. It will create a new file based on the date.
 - ii. You can then save this new file onto a CD or keep it on your desktop.
 - iii. To recover a file, select the Backup recovery tab and select the dated file you would like.



2. Repair

- a. Close all programs so you are back at the Windows screen.
- b. Select start.
- c. Select All Programs.
- d. Select iMETT Galileo.
- e. Select Reparador (repair).
- f. On the right side of the screen, select each button one at a time (each will take only a few seconds)
 - i. Verify Table
 - ii. Repair Table
 - iii. Reconstruct indices
 - iv. Reconstruct table
 1. This will repair the out of index error and should say “error message 17”
 2. If the software freezes on this button, close the screen by clicking on the red “X” in the right top corner. The repair is complete.
 - v. Compact table

3. To recover a file, select the backup recovery tab and select the dated file you would like.

- a. Make sure to select the last backup without the error in it (it may be the previous date).

QUESTIONS AND ANSWERS

iMETT User's Questions and Answers

If you have questions that are not answered here,
contact Paul Robbins:

Fax: 480.449.9200

Email: probbins@athletesperformance.com

1. How do you determine the client's "best protocol" speed?

The "best protocol" speed is a comfortable running or walking speed for the client. The goal of the test is to determine a speed they can handle comfortably. The incline should be what pushes them to their AT to peak.

2. Regarding the mask, what, if any, breathing instruction do you offer?

The client should not focus on their breathing and should breathe as they normally do when working out.

3. Do you suggest tightening the chin or cheek straps first on the mask?

Tighten the cheek strap first.

4. Is it possible to get masks with longer tubing?

No. The masks are a set length to insure the flow volume is correct.

5. Is it possible to get smaller head pieces?

At this time, there is only one size available. On younger athletes, the straps can be tucked underneath the headpiece for a better fit.

6. Is there a reference point to share with clients regarding their fitness ranking? In other words, clients are asking if they are "average", then wondering what numbers would qualify them as "above average" (numbers for VO₂ and HR peak)?

See chart for VO₂ found in Offline Stress Test section of this manual. There is no reference for HR (other than 220 – age). The main reason for this test is to determine true HR zones because there are no set formulas. Everyone is different.

7. A pop-up box appears and reads "This subject has one or more exercise prescriptions. Do you want to add this VT assessment to the last one? If you answer "no" a new exercise prescription will be started and the VT assessment will be added to it". What does this mean?

This comes up every time you open the periodization software . Answering yes enables you to add to your current program.

8. Why is it that sometimes the blue vertical line and the dot are automatically present and correct, while other times present but not correct?

The software is designed to get close to identifying AT, but no software is 100% accurate. You always have the last read and you can select AT manually by moving the line.

9. How do I utilize the training zone tab?

Currently this is just to show trainers how to design additional HR zones. It doesn't work with the programs since we only use 3 zones. Some clients do the testing and provide their own 4-5 zone programs.

10. How often do you recommend retesting and how often do you find yourself "tweaking" the workouts with drag and drop?

Retesting is recommended for new clients 4-6 weeks after initial testing and active clients every 4-6 months. You should change the workout programs every 4-6 weeks.

11. What are your thoughts for a client that wants their workout harder?

The QF will give them the best program to start. Trainers can then modify the program for the client's personal needs.

12. Do you charge for adjusting workouts?

Yes, I charge it as a personal training session.

13. Do you charge the initial workout separately from the test, or do you roll it into the initial test expense?

I recommend you create a cardiovascular personal training package which included the test.

14. With athletes, do I go to their Borg's 8-9, even if they aren't there yet on the scale, but their heart has sub maxed, or do I go into recovery with them (for example: new clients, when heart rate has reached sub max)?

With athletes, take them until they want to stop (8-9 minutes). Don't worry about the % HR, as that is just an estimate (220-age). The goal is to determine their individual HR's.

15. Does recovery (ex. prescription) always give a 6 day series and low cardio a 9 day series?

Yes, they are set progressions to get the client to the next level.

16. As I understand it, anaerobic threshold (AT) and lactate threshold (LT) are, by definition, two separate points of intensity within an athlete's training range. However, I read trade / online journals and training programs where these two terms are used interchangeably. AT is measured through oxygen analysis (VO2) and LT is measured with blood analysis (finger prick). How can these two be the "same" when measured VO2 at AT is sub maximal and LT occurs at max or near max output?

Most people that use LT also get a submax, so they are trying to get close to AT. Based on the references I have read, LT comes just before AT and when designing training zones, they can be used the same way.

17. All of the programming I do is centered around AT and the other information derived from CC test data. How much, if any, should be based on LT?

Because AT is so close to LT and most fitness facilities stay away from blood testing, use AT.

18. Does interval training that brings an athlete above AT only benefit the PEAK ranges of VO₂? Or is there relative benefit to the lower ranges that involve fat burning?

The goal is to increase both the AT and peak zones with this type of training. If we move the AT up, fat burning moves up as well.

19. If an athlete's tests are average or good in VO₂ ranges and training protocols indicate medium cardio workouts hovering around AT, what is the expected length of "base building" that must occur in terms of number of workouts or weeks in a program to achieve an increase in these scores?

4-6 weeks of base building.

20. The overriding (and overwhelming) factors that bring these questions are a direct reflection of having to adjust the mindset of lowering intensity to achieve greater results. At the same time, the mind sometimes gets in the way of reason as perceived exertion levels will make an athlete want to go harder and further, when that accomplishment will not bring them to their goal. What have you found to be the most compelling argument to drive this point across to your athletes?

On their hard interval days, they should be pushed to the limit. They then look forward to the next day which is recovery. Just like weight training, they have to overload and the recovery phase is the most important.

21. Is there a resource available that ranks heart rate recovery as poor / fair / average / good / excellent based on percent of return to resting HR within 2 minutes? Clients want to know if their heart rate recovery is "good".

This is based on how fast they return to aerobic zone (yellow zone):

- Excellent – drop more than 15% below AT (this is the low end of yellow zone)
- Good – drop 14% - 5% below AT (this is the top of the yellow zone)
- Poor – if they don't return to yellow zone.

22. I have a client who wants to know why the majority of her prescribed workout is above her anaerobic threshold.

If you are using the 3 day rotation from the Quick Reference (yellow, green and red days), then they are not doing the majority of their work above AT. They have one whole day in yellow and then a high percentage of the other days have yellow for warm-up, recovery between intervals, and cool down in yellow as well. Don't just look at one day, look at the whole progression.

The reason that we do have intervals above AT is to burn calories and increase cardiovascular strength.

23. I was running a test and the VE wasn't showing up. The green line stayed along the bottom of the chart.

This means there is something in the line, possibly water. Try to pump it out or just whip the line around and it should clear it. Make sure the hoses are always up during the test to avoid water in them.

24. How do I back up the data?

From Windows, open ALL PROGRAMS and select Galileo. There will be an option to backup. You can backup on the hard drive or onto a CD by selecting CREATE BACKUP. I suggest doing this once a month.

25. What do I do if there was no AT picked?

If no AT was selected, go to the VO2 off screen. Create an AT line by clicking about $\frac{3}{4}$ of the way during the test in the "SEL" column, on the far right side. This will create a blue line on the "chart" screen for you to make any adjustments needed.

26. No HR. Any suggestions on what the issue might be? The receiver is literally right up next to the treadmill, so only about 12" from the monitor on the client. Can there be interference issues with the receiver in the treadmill (even though they are both Polar®)?

First, make sure the cable is plugged into the unit and the Polar® receiver is plugged into the end of the cable. The interference is sometimes from the treadmill itself. When you lose the HR, try holding it behind the client. You may have to move it around to find the best spot. Also, make sure there are no cell phones nearby. As a backup, you can use a HR watch. On the data page (VO2 off icon) you can override the HR and type in the correct one or add a recovery HR. This way you can always create a program and printout. Also check to see if the heart rate strap is on tight and is working correctly.

27. How do you convert from mph to km/h? Can we do this without changing all of the protocols?

You will need to create new protocols or, if you are only using km/h, change the speed and rename them. To change to km/h, go to configuration – environment – stress test – then highlight mph under speed and a drop down arrow will appear. You can then change that to km/h. Finally, rename it.

28. What are the criteria before running a test? How much rest, exercise or activity can be done prior to a test, how much should they eat? What should they eat or drink, etc.?

No hard workouts 24 hours before the test is recommended (the legs should be as fresh as possible). No drinks that will increase the heart rate before the test.

29. If I have a test where the HR and VE have a matching increase, then 2 minutes later you have just a VE increase, which spike do you choose?

The rule is the last sharp rise is the VE. If there are two close to one another; choose the one with the lower HR. You are creating HR zones, so the second will fall into this zone and that way you are not over-training with too high of a zone.

30. Once a person turns anaerobic, can they turn back to aerobic during the same workout? The person's heart rate may come back down to the yellow zone, but what happens metabolically with them?

Metabolically, no. It takes time to get back to an aerobic state. The yellow zone is designed for recovery to get the most out of the intervals. But on a recovery day you will stay in the aerobic zone / system throughout the complete workout.

31. If someone is doing a long run and staying within their yellow zone for say 140 minutes of a 160 minute run, but runs faster their last 20 minutes increasing their heart rate into the green zone, have they lost the intended benefit of the long run within the yellow zone?

No, it's a great way to do training. The work in the aerobic zone builds a base and strong endurance, then the overload, will build more cardiovascular strength with the last 20 minutes.

32. When it says repeat the 5 minutes of work and recover, is the yellow zone (cool down) the recovery?

Yes, the 5 minutes is their active recovery (yellow) before starting the interval again. It could be called cool down or recovery. Both mean you will do the active recovery before starting the work phase again. You don't need to repeat the warm-up.

33. Can I modify the notes section if I wanted to put my own notes in it?

Not at this time, however there is space to hand write notes once it is printed out.

34. Can the iMETT do BMR?

No. the flow is not set up that low.

35. Is there a written summary / printout of the results of the VO2 test?

Yes. On the main screen (Galileo) you will see a print icon. Open that and on the last line there are options for printing. I suggest the "results" under periodization (lower right box). It will match up with the periodization software. You can also get the charts and :30 data by selecting graphs and records.

36. On the printout for the VO2, the page that shows the time, speed, etc., is the green line (VT), or the exertion peak the person's VO2?

Green is AT, red is peak and yellow recovery. After you perform the test, you can send the data to periodization right from Galileo. From there, go to the print screen and print the workouts in card form as well as the planner.

37. What should I be giving my clients to take home?

I suggest the workouts in “card form” for 4 weeks (6 weeks in some programs). You can also give them the report form from the Galileo under periodization “results”.

38. What is their actual VO2 score? Is it the VO2 max attained (ml/kg/min) or is it the VO2, VT? What is the difference?

You get both scores. The VT (same as AT) is where they turn anaerobic and the higher VO2 is their peak, or the end of the test, whichever comes first. The fitness score will tell them if they are poor, average or good based on age and gender.

39. What is the difference in VO2 from taking a max test and sub max test?

Max is complete failure. Peak is a submax that gives a HR they can perform intervals at. Not many clients will want to do a true max. The submax peak will give you all the data you need to create a workout program.

40. Are there articles and manuals I can read to help understand the whole program?

There are two cardio DVD's available through NASM that will help. One on general cardiovascular fitness and another on sport specific. Go to NASM.org.

41. If someone is deconditioned and has not done cardio in a long time with the exception of maybe jogging for 20 minutes, 1 time every 2 months, what type of protocol would you put them on? Would walking 4.0 mph be appropriate?

Yes, start with a 3 or 4 mph walk.

42. Do you have additional workout programs? I remember you had mentioned a triathlon program and a program for firefighters, but I don't have them in my Periodization software.

All the workouts for triathletes and firefighters are in the program, but you just have to put them in the order you want. There are too many options for triathletes based on weakness, level, and goals so it has been very hard to write them in the program. You should create their progression based on their goals, cardio strength, leg strength, recovery and endurance. The basic training program has a good mix of all of these (the firefighters program was created with high cardiovascular and leg strength). More workouts will be available on the NASM website this fall.

43. How do I order the iMETT marketing package?

Call WOODWAY directly at 1.800.WOODWAY (966.3929).

44. What is the difference between “low rehab” and “high rehab” in the periodization program? Are they meant for fit vs. unfit people or are they meant to be the initial program (low) and advanced programs as (high)?

Low is for someone that is just coming off rehab and starting off slowly, high is the next level. Once they complete these they can go on to any of the other goals.

45. If someone normally does incline walking or elliptical work can they also benefit from this test? It's not just for runners, right?

Yes, there are walking and cycle protocols. When they are on the treadmill, just get them to a comfortable speed and use incline to push them.

46. Can you explain the percent peak to VO₂ value? What does this mean and what if a beginner scores at 91%?

If the VO₂ is low then the % doesn't mean much. It shows that they peak out too soon after AT. In this case, it shows that the client could have a good base but once they are pushed they fatigue quickly.

47. After I perform the assessment what should I be going over with the client?

Go over the test scores but spend most of your time on the program and where their HR should be.

48. Sometimes the program gives them a low cardio program, which lasts only 2 weeks. Can I give them a 6 week program and if so which workouts do I insert into the dates?

You can drag any workout over after the computer gives you the first one. When you go to print, you select the start date and end date so you can choose the period of weeks the program should run.

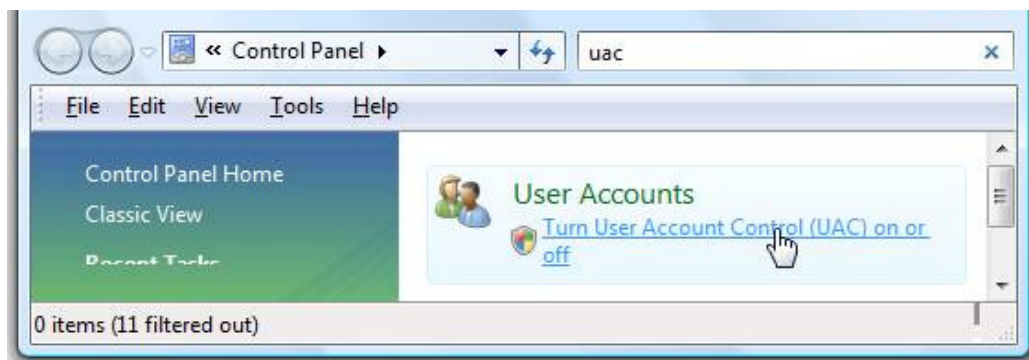
49. The error "out of bounds" is showing, what does this mean?

It means the date is off. The first thing is to back up the data, from windows. Open ALL PROGRAMS and select Galileo. There will be an option to "backup", you can backup on the hard drive or onto a CD by selecting create backup. I suggest doing this once a month.

Then go back to programs and find Galileo again. This time select repair, choose ALL DATABASE, then REPAIR TABLE. Restart the software and it should be back on line. If you lost any data then just restore it from the backup.

50. How do I get the iMETT to work on Vista?

Open Control Panel, and type in "UAC" into the search box. You'll see a link for "Turn User Account Control (UAC) on or off":



On the next screen you should uncheck the box for "Use User Account Control (UAC)", and then click on the OK button. You will need to reboot your computer before the changes take effect.



PROGRAM EXPLANATION

iMETT Program Explanation

Workouts - all progressions are made up of a three day rotation; *Recovery*, *Medium*, and *Interval*. There are a variety of workouts under each heading to allow you create your own progression or substitute for a current workout.

Interval programs – will have 3-5 minutes of work followed by recovery periods. You will repeat the work to rest as many times as the clients has time for that day. You do not have to set a time- it's based on what they can do and what they have time for.

- **Recovery** - These are workouts designed to keep the client in a recovery zone for long periods. Used every third day for recovery.
- **Medium** - The goal of medium intensity is to spend time around AT
- **Interval** - The goal of these workouts is to push the client to the next level. It will work on the energy system that is needed for this client base on the time at every interval.

Fitness Goals

Microcycles – These are three workouts put together (Rec, Med, Int)

- **Base Training** - The goal of this progression is to create a good cardio base for the client before going into the sport specific progression. The base training will have the client work on recovery, cardio strength and leg strength.
- **Soccer** - The goal of this progression is to work the energy systems needed for soccer. This can be used for pre season or through the season. Starts with cardio strength of 1 minute intervals and works to circuits of :05 and :07 sprints.
- **Basketball** - The goal of this progression is to work the energy systems needed for basketball. This can be used for pre season or through the season. Uses a lot of circuits with :15 and :05 sprints.
- **Hockey** - The goal of this progression is to work the energy systems needed for hockey forwards and defensemen. This can be used for pre season. Works on leg strength and :45 sprints. During the season it best to use the basic training - time is based on ice time during games.
- **Runner Cardio** - the goal of this running progression is to help the client increase AT by training close to peak during longer intervals.
- **Cyclist Cardio** - the goal of this bike progression is to help the client increase AT by training close to peak during longer intervals.
- **Runner Leg** - the goal of this running progression is to help the client build leg strength for climbing hills.
- **Cyclist Leg** - the goal of this bike progression is to help the client build leg strength for climbing hills.
- **Football Skill** - The goal of this progression is to work the energy systems needed for football skill players. This can be used for pre season or through the season. Mainly circuits from :05 to :15.

- **Football Line** - The goal of this progression is to work the energy systems needed for football lineman. This can be used for pre season or through the season. Short circuits with :05 sprints.
- **Tennis** - The goal of this progression is to work the energy systems needed for tennis. This can be used for pre season or through the season. Circuits of :05 and :07 sprints and leg strength
- **Golf** - The goal of this progression is to work the energy systems needed for golf. This can be used for pre season or through the season. Combination of recovery, leg strength and cardio programs to keep the client balanced throughout the season.
- **Baseball Field** - The goal of this progression is to work the energy systems needed for a baseball player- mainly a fielder. This can be used for pre season or through the season. Cardio Strength using :30 and 1:00 sprints with leg strength.
- **Baseball Pitcher** - The goal of this progression is to work the energy systems needed for baseball pitcher. This can be used for pre season or through the season. :05 and :15 sprints with leg strength.
- **Hockey Goalie** - The goal of this progression is to work the energy systems needed for hockey goalie. This can be used for pre season or through the season. :05 and :15 sprints and leg strength.
- **5K run** - This progression is designed to help client increase leg strength, improve AT and cardio strength to better prepare for a 5 K run. Not designed for a beginner- designed for a 5K run to improve.
- **10K run** - This progression is designed to help client increase leg strength, improve AT and cardio strength to better prepare for a 10 K run. Not designed for a beginner- designed for a 10K run to improve. The interval are longer than the 5K
- **Obesity** - this is very slow progression to get the client to build a good cardio base before introducing intervals. The goal is for weight loss on low impact equipment.
- **Plateau** - This progression has a variety of workouts to push the client above their comfort zone and break over any plateau. Great progression for anyone that needs a change from the base routine. The goal is to use a variety of equipment as well.
- **During Pregnancy** - this program is designed for any client that knows her AT zones before starting. The progression will just give her variety without pushing to peak.
- **Post Pregnancy** - this is a slow progression to get the client back into cardio training slowly.
- **Weight Loss** - This progression has a lot of variety. The goal is to get the client to increase their metabolism by over loading and calorie burning without burning out.
- **Weight Gain** - This progression is designed to be short- 10-15 minutes long total. They will promote cardio strength increases without burning too many calories.
- **Rehab Low** - This progression is designed for someone that is just starting back for an injury but has training in the past. They should still have a good cardio base but we have to build up time in the first two zones first.
- **Rehab Med** - the next progression after low rehab. If the client is now ready to get back to the level they were before the injury- this progression has time still in the first two zones but will also ramp them up with hard cardio intervals.

Mesocycles- this would be a series of Microcycles put together in a complete rotation.

Macrocycles- no programs designed at this time.

How to put progressions together - there are 100s of ways to set the progressions up. It all depends on the client's goals and fitness level.

The progressions work together by slow ramping the workouts up during the progression. When you start the next progression it will start with easy workouts again and slowly over load. This will make sure the client doesn't hit a plateau. They will be pushed to their limits at the end of a progression and naturally start again with an unload. You could also add a complete one week unload (all yellow zone 1) between progressions.

Basic- For a beginner they should do the low cardio (or low recovery), then medium cardio and then high cardio. From there you can go into in fitness goal.

After medium or high cardio – general club member- try doing a goal to improve leg strength. This will help in over all cross training on different pieces of equipment. The goal is to make the client strong on every type of equipment (bike, stair machine, etc...) so they can get cardio benefits without burning out the legs. After the leg strength you can repeat high cardio and then work on another goal. You could also just keep repeating cardio and leg strength.

Sports- The after the “quick reference” if you have time you can go into the basic training. This will give a good mixture of all workouts to prepare the client for any sport. Just before their season you can pick their sport specific progression.

Weight loss- Start with the quick reference then add the weight loss progression for long term progression. This can be repeated many times.

Change of pace- Sometimes client's just want a change in the program. You can put any of the sports progressions together to give your client variety. Look at the sprint intervals to decide if your client would like it. The goal is to keep the client coming back for more- all the programs will aid in cardio improvements and weight loss.

SOFTWARE UPGRADES

How to Upgrade Galileo Software

First create a backup of your present database by creating a folder in My Documents.

1. Click on START and go to My Computer
2. Open your computer's hard drive this is typically your Local Disk C Drive
3. Open Program Files (C:\Program Files)
4. In the Program Files folder, open the folder named FitStation (C:\Program Files\FitStation)
5. In the FITSTATION Folder, there is a folder named Data, right click the mouse and Copy the Data folder
6. Now open your computer's My Documents folder and right click your mouse and Paste the Date file. Now you have backed up your old Galileo database. This folder will be used after the new Galileo Software is installed.

Next delete your old Galileo Software

1. Click on START and go to Control Panel
2. Click on Add and Remove Programs
3. Locate Galileo, highlight it and delete it

Now you are ready to install Galileo Version 2.0.2.231

1. Insert the Galileo Version 2.0.2.231 CD ROM into your computer, the program will start automatically.
2. Follow the wizard to complete the installation.

To use files from your old database follow these steps

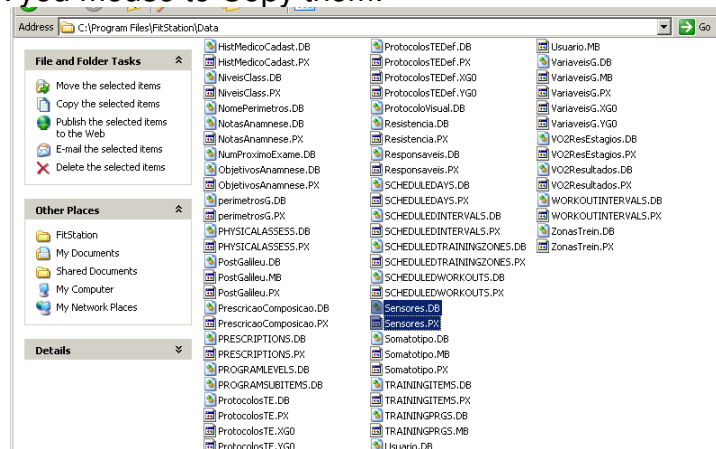
1. Click on START and go to My Computer
2. Open your computer's hard drive this is typically your Local Disk C Drive
3. Open Program Files (C:\Program Files)
4. In the Program Files folder, open the folder named FitStation (C:\Program Files\FitStation)

5. In the FITSTATION Folder, there is a folder named Data, open it

6. In the new Data folder you'll find two files, Sensores.PX and Sensores.DB



7. Highlight both click you mouse to Copy them.



8. Go to My Documents and open your old Data folder, right click and Paste the files into the folder of the backed up database.

9. Now Copy the entire back-up Data folder in My Documents

Now you are ready to remove the new database generated by the upgraded Galileo version 2.0.2.231 and replace with your backup.

1. Click on START and go to My Computer

2. Open your computer's hard drive this is typically your Local Disk C Drive

3. Open Program Files (C:\Program Files)

4. In the Program Files folder, open the folder named FitStation (C:\Program Files\FitStation)

5. In the FitStation Folder, delete the folder named Data

6. Now right click and Paste the back-up data folder (from My Documents) into the FitStation Folder (where you just deleted it)

Now that you have upgraded your Galileo Software, you must re-load your Periodization Software so that it recognizes the updates. Your updated Galileo Program will now use all of your existing data files.

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