daum electronic

ergo_lyps Premium8

User Manual

CE

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Miscelleaneous

This ergometer is specially designed for health and endurance training. High quality manufacturing, an easy to read dashboard, and ease of use and of maintenance contribute to make this appliance an ideal training device for sport and fitness training. We would also stress that the complete equipment list and the convincing performance range appeal to athletes and fitness conscious persons of every age group.

Introduction

Designed and manufactured in conformity with the DIN EN 957 1/-9 Class SA/HA standard, the ergo_lyps is suited for a therapeutic utilisation (It does not meet the requirements for medical diagnosis usage in medical clinics). An important aspect, and therefore an identifying feature, of an ergometer is the fact that the required pedalling resistance in watt can be prescribed. This pedalling resistance will be maintained irrespective of the pedalling speed (as shown on the diagram of page 38).

This means that the user can work out under a steady load at various speeds, and unconstrained by the speed. The advantage being that the user cannot unknowingly be subjected to a wrong load.

At the heart of the ergo_lyps is the full electronically controlled, maintenance free, eddy current brake, which adjusts the braking load to fit the user's personal requirements based on the computed data, and which allows load setting continuously from 20 to 400 Watt.

The **ergo_lyps premium8** is thus more than just a "Home Trainer", since it can be used for sportive and therapeutic objectives.

Keywords Glossary / Info Texts

Please refer to the information concerning each operation status stored in the dashboard. Use the Info-key to display this information.

The keywords glossary provides additional information and explanations.

The keywords glossary and the info-texts are an essential part of this user manual.

Data-Interface

You can use a personal computer (PC) to control the **ergo_lyps premium8**. A special data cable is needed to this effect, which you can order from daum electronics gmbh.

Using the Device in Compliance with the Recommendations

The ergometers of the ergo_lyps premium8 series may be used exclusively for ergomettry, cardiovascular rehabilitation and for kinesitherapy.

Their use is only allowed in compliance with the instructions of the user manual.

The manufacturer will not be held liable if the ergometer is not used in compliance with the provided instructions and consequently causes injury to persons or other severe consequences, as well as material damages.

The CE label covers only the accessories included in the package.

Every user of this device, who is concerned with assembling, maintaining, testing or troubleshooting it, must read and understand the contents of this user manual before starting to work on the device.

The quality assurance system used at daum electronic gmbh complies with the DIN EN ISO 13485:2003 standard.

daum electronic gmbh considers itself to be liable for the safety, reliability and functionality of the device only if:
- the device is used in compliance with the instructions of the user manual.

The user

Please read the user manual carefully before starting to use the training device. The user manual should be kept in the direct vicinity of the ergo_lyps premium8. It is an integral component of the device.

User Safety

When coupling many devices to a test site care must be taken to avoid any danger arising from the summation of the leakage currents and to ensure the potential equalisation is effected through a common current (power) supply (e.g. a wall socket-outlet). If you have any questions please ask your dealer or the service department of daum electronic gmbh.
If a socket with multiple outlets is installed after the initial start-up, no other device may be connected to this socket. (use covers on the multiple sockets)
An electrical shock hazard exists when touching devices that are not separately grounded.
Defective or faulty devices and accessories may not be used.
The personal computer and all other connected devices (e.g. monitor, printer, etc) must be installed at least 1.5m away from the training place, because leakage currents could be generated on the housing (or use separate grounding, housing leakage current).

Notes From the Manufacturer to the User

The device is not protected against the infiltration of liquids.
Direct contact with humidity or liquids must absolutely be avoided.
Care must be taken to wipe out sweat drops after training (sweat attacks paint and plastic parts)
Damages caused by sweat are not covered by the warranty

Accessories

The device may only be used with the accessories prescribed and distributed by daum electronic gmbh.
Every accessory item and every device connected must be manufactured in conformity with the corresponding standard, e.g. DIN EN 60950 for computer devices, DIN EN 60601-1 for electromedical devices.

Software

The supplied software may only be copied and archived for safety and functional reasons. In special cases a request must be addressed in writing to daum electronic gmbh. Releasing it to non-authorised persons is not allowed. The ergo-lyps premium8 may only be used with the internal and external softwares supplied and authorised by daum electronic gmbh.

Documentation

The documentation supplied is an integral part of the ergo_lyps premium8 and may only be copied or distributed with the authorisation of daum electronic gmbh.

Other Notes

All the diagrams and evaluations are to be considered as a suggestion from the device. When providing a diagnosis the results must always be controlled and evaluated by a qualified physician.
The electronic installations of the rooms where the device will be used must absolutely comply with the requirements of directive VDE 0107.
The device is not suited for operation in rooms and / or areas with explosion risks.
Cellular telephones may not be used in the direct vicinity of the device, otherwise they may interfere with its functionality.
Wireless telephones may be used.
Electromagnetic interference are primarily characterised by the oscillation of the displayed load value. If the displayed value varies uncontrollably frequently, even when the speed is higher than 30 /min, this can be an effect of electromagnetic compatibility (EMC).
Only cables certified by daum electronic gmbh may be used to connect the device with other devices.

Information About Personal Safety

The ergo_lyps ergometer is intended for adults. Children should only be allowed to train with the ergometer under adult supervision.

Persons suffering from any of the following diseases should consult their family physician or a specialist before starting training with the ergo_lyps.

- Heart disorders like angina pectoris, coronary thrombosis (infarct), stenosis, and high blood pressure
- Diabetes
- Respiratory disorders like asthma, chronic bronchitis, etc.
- Rheumatism
- Gout
- Or any other disease or illness

You should never train when you feel ill or weak.

Persons who are not used to exercise must start with an easy training program, and then increase the load intensity very gradually. Persons with declared health problems must evaluate their personal risks with the help of their family physician.

You should never use the ergo_lyps to find out your maximum degree of physical endurance. This can have serious consequences on your health!

Training Conditions

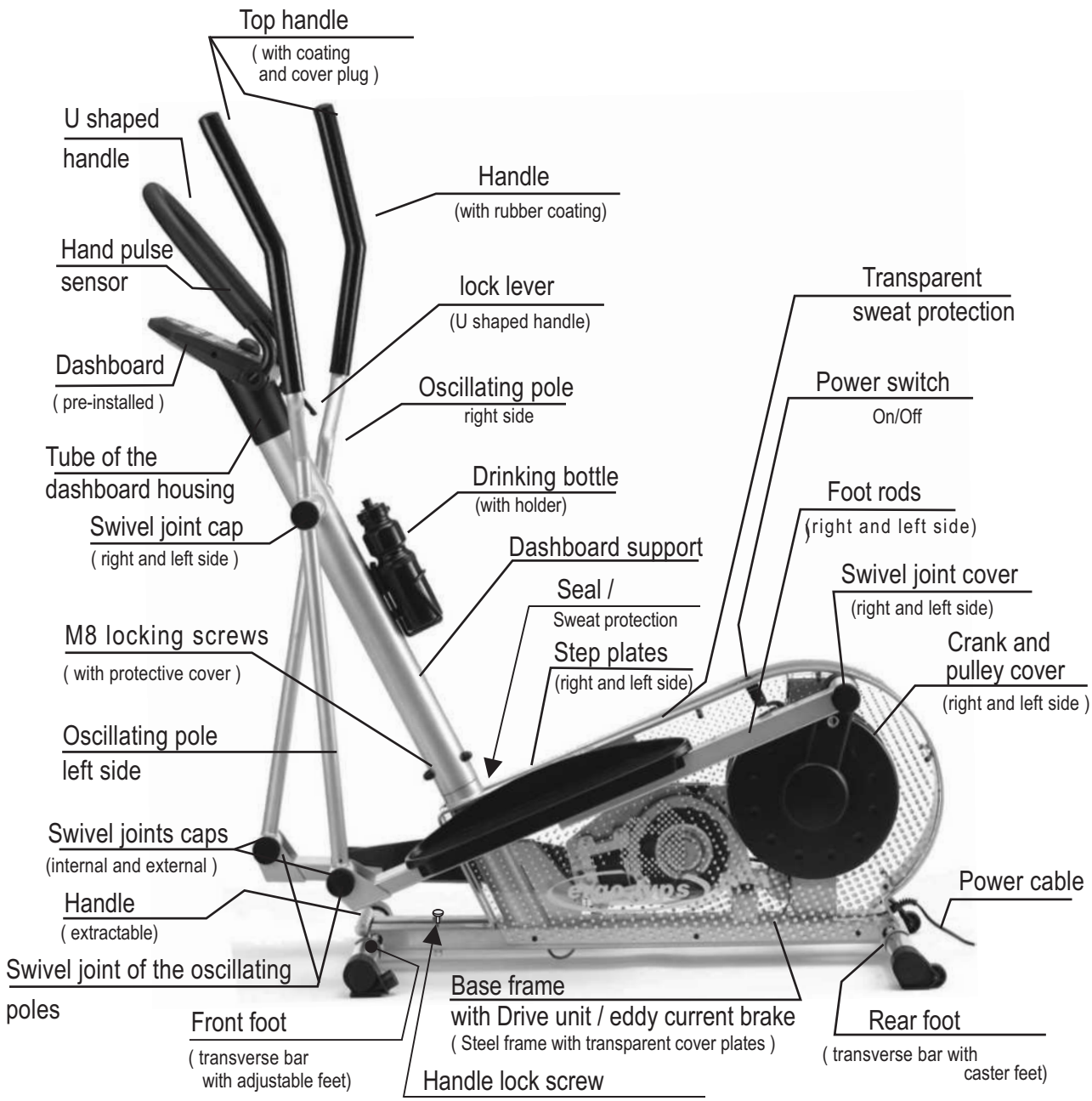
You should pay attention to providing good training conditions; this includes choosing the training room and installation place. Makeshift installation places do not incite to training!

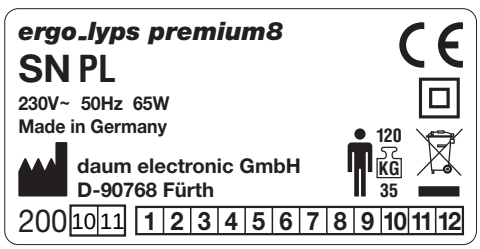
Note!

You will find more information about training for sport and health in the pocket book “Training with the bike ergometer” Improvement of health and fitness as training target with the ergo_lyps (in German).

Order from: daum electronic gmbh
Flugplatzstr. 100
D-90768 Fürth
Fax ++49(0)911/753714

Control Elements and Connections



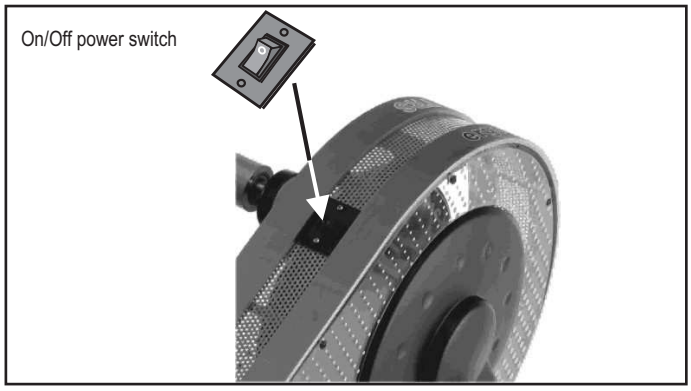


Switching On / Off

Please read the safety notes before switching the ergo_lyps premium8 on, and follow the installation and assembly instructions.

Insert the ergo_memo-card2 in the dashboard before switching the device on.

Use the On/Off switch " I " on the lower rear section of the device to switch it on and off.

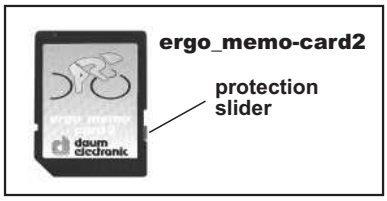


When switched on, the system takes about 1 minute to load the software. The colour screen displays during this time a software load progress bar.
Wait for the beep signal before using the dashboard.

If the memory card is inserted after the device is switched on then you must wait for the beep signal. This can take about 5 seconds. (if the card is empty it will be initialised)

In principle the memory card should be pulled out while you are not pedalling or only after the beep signal!

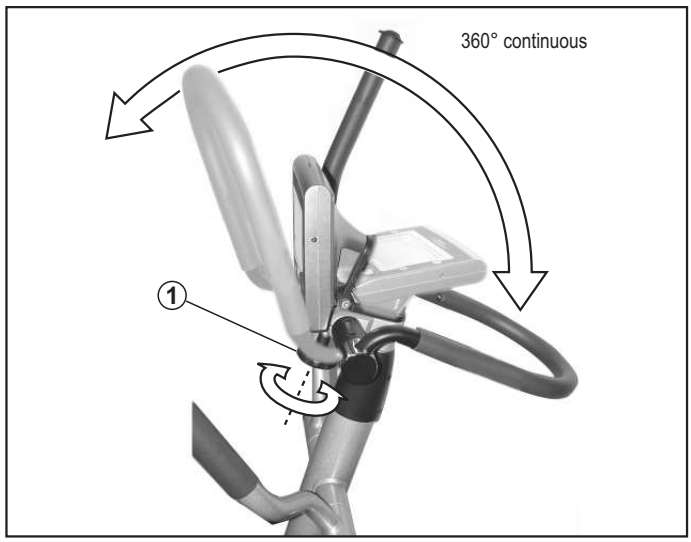
The protection slider on the ergo_memo-card2 must point to the bottom when the card is inserted into the dashboard. This will make it possible to write to the card.If the slider points upward the card is locked/write protected.



Only then can you use a computer to save e.g. mp3 files (in the \mp3 folder) or update files (in the \update folder) on the card.

U shaped Handle

Loosen the star knob (1) adjust the U shaped handle and the dashboard to the required position and tighten the star knob back.
Be careful while adjusting the handle to avoid cutting the cable.



Notes about Pulse Rate Measure

Pulse Rate Measure on the Hands

The integrated hand pulse rate sensor can be used to control the pulse rate for short periods of time. Hand pulse rate measure is too imprecise during the training because it reacts too slowly to pulse rate variations. Moreover, to achieve a correct measure you should lay your hands relaxed and loose (not tight) on the electrodes.

The hand pulse rate measure is set to “Off” by the manufacturer. The chapter about the dashboard user guide gives the instructions on how to turn it on.

The variations of the electrical resistance of the skin as a consequence of heart pulses are so weak for some persons that no usable measure can be obtained.

Note:
If measuring the pulse rate over the hand electrodes gives no results, we recommend using either the ear clip method or the Cardio sensor chest strap.

Ear Pulse Rate Measure

Every heart pulse modulates the light passing through the lobe, and can thus be detected by an infrared sensor in the ear clip, and displayed as heart pulse rate. The measure of the pulse rate over the ear is much more precise than the measure over the hand sensor.

Please make sure that the ear clip is correctly put on:

1. Insert the connector into the Cardio socket.
2. You should rub the ear lobe to stimulate blood circulation.
3. Attach the ear clip to the ear lobe (the closest possible to the head). The contact surfaces must sit entirely on the skin.

The scattering in the display of the pulse rate variability is larger than with the wireless pulse measure (factor 2).

Note: Strong light sources, like sunlight, halogen projectors, and neon lamps, and also ear piercing or ear rings, or the intake of beta-blocker could affect the measurements.

Ear clip

Wirless Pulse Measure

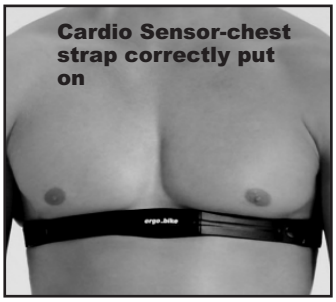
The Cardio sensor chest strap transmits the pulse rate directly to the integrated wireless Cardio pulse receiver in the device. This pulse measurement method is the most precise.

Note: Your pulse rate will be correctly evaluated over the whole measuring range only if you use a non-coded wireless pulse rate transmitter.

To ensure the maximum efficiency of the Cardio sensor strap, you should lightly humidify the contact surfaces (inner side) of the chest strap before starting the training.

Note: Using two chest straps simultaneously in the same room, either of the coded or non-coded type, at about 1.5 meter from the receiver, can lead to the display of a wrong pulse rate.

Cardio Sensor-Strap



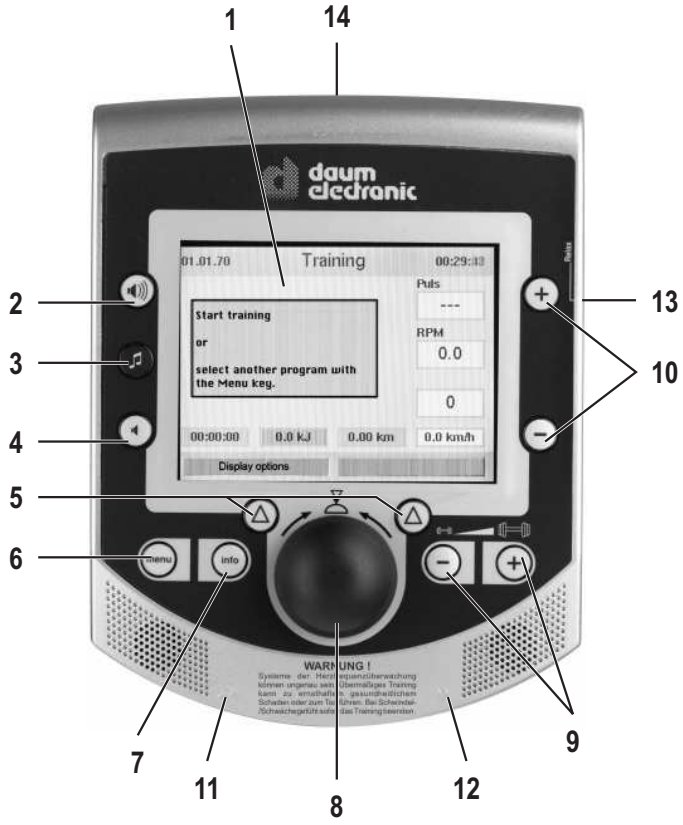
Note:

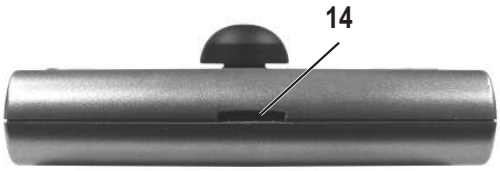
When you train without ergo_memo-card2 you will not have the possibility to store training results.
When you train without pulse rate measure, the pulse rate will not be displayed!

The user controls the dashboard by means of the control button, the Menu key, the Info key and the two function keys.

Use the Info key to obtain more information about the individual menu items.

If the requested information spans many pages, you can leaf through the pages by turning the control button. Press the Info key to display the keywords glossary (page 21).





Front side of the console

Top panel

1. Colour screen

2. Volume (up)

3. MP3-Player

4. Volume (down)

5. Function keys

6. Menu
Calls the main menu

7. Info
Displays detailed information about the current situation

8. Control button
By turning and pressing this button you can select and open menu items

9. -/+ Dumbbell
Decrease or increase the load

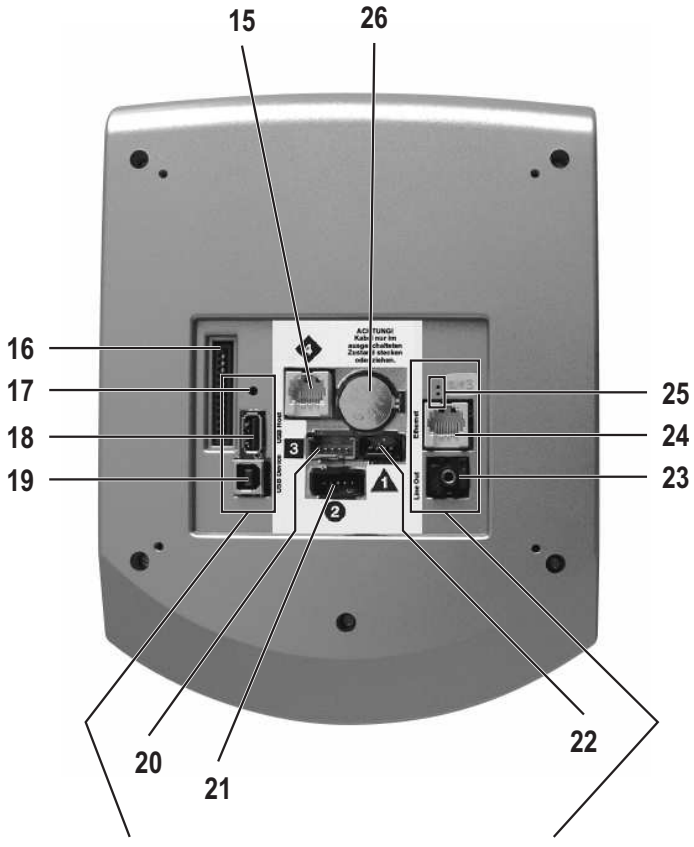
10. -/+ Values
Decrease or increase the pulse rate, RPM, torque and gear
The value that can be actually modified will be colour-highlighted in the training view.

11. Audio connector
Used to connect a headphone

12. Cardio connector
Used to connect the ear clip

13. Relax connector
Used to connect the Relax sensor

14. Card reader for the ergo_memo-card2



These areas are still visible when installed

Underside

15. RS422 interface to the control board

16. Treadmill keyboard

17. Reset key

18. USB-Host

19. USB-Slave

20. Wireless pulse rate

21. Operating power from control board

22. Hand pulse rate

23. Audio connector L/R to external amplifier (Line Out)

24. Network connector (Ethernet)

25. Light-emitting diode (LED) for network connector

26. Battery 3.3 V

Battery replacement

The button cell battery (CR 2032) is located on the underside of the circuit board of the dashboard. Replace this battery when you notice a loss of time and date on the system clock. (See the maintenance section)

Please use the ergo_memo-card2 with every training session to store your personal settings and actual training data. This card is user related. It is not possible to store the personal settings of a second user on the same card.

Note:

When you train without ergo_memo-card2 you will not have the possibility to store training results.
When you train without pulse rate measure, the pulse rate will not be displayed!

The user controls the dashboard by means of the control button, the Menu key, the Info key and two function keys.

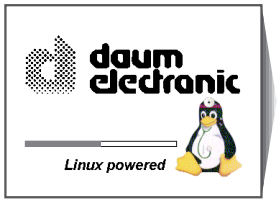
Use the info key to obtain more information about the individual menu items.

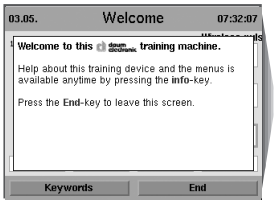
If the requested information spans many pages, you can leaf through the pages by turning the control button. Press the Info key to display the keywords glossary (page 17).

Note:
We reserve the right to modify the figures!

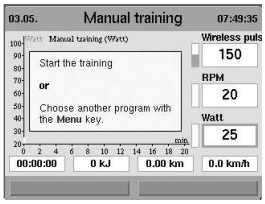
Insert the ergo_memo-card2 in the card reader before turning the device on.

Switching ON (with ergo_memo-card2)



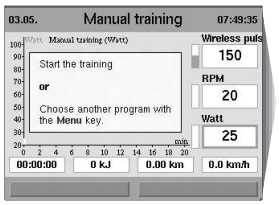


Press the function key under "End"

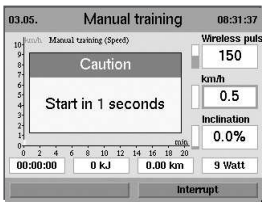


Starting Training Without Selecting a Program

You can start training immediately with this screen displayed.

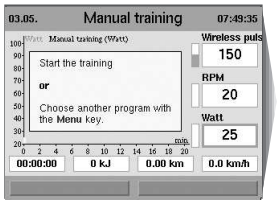


Start pedalling



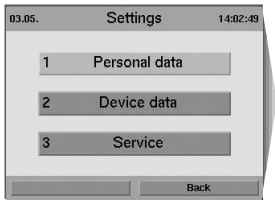
Setting Personal Data

Before training you should enter your personal data and limit values under menu item "Setting".
User and device data can be set here.

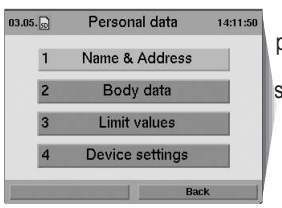


Press the Menu key

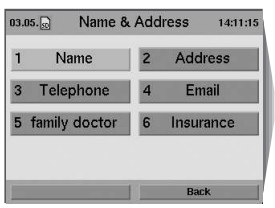
Turn and press control button to select "Setting"



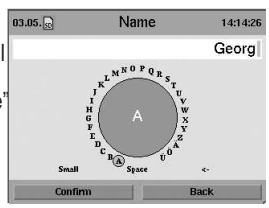
Turn and press control button to select "Personal data"



Turn and press control button to select "Name & Addr."



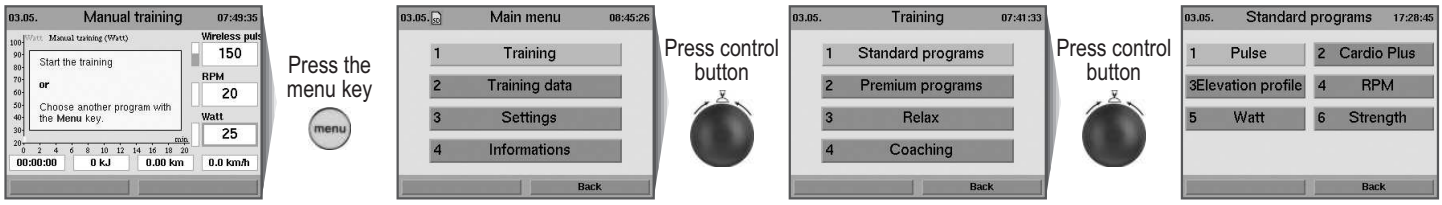
Turn and press control button to select "Name"



You can enter all the characters and special characters by turning and pressing the control button. Use the position "Small" to switch between capital and small characters as well as special characters. Use the "**<-**" position to delete and correct your entry

Starting Training by Selecting a Program

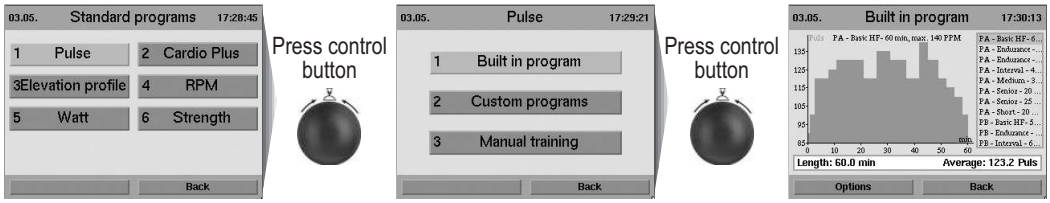
You can choose from various program types.



Training Programs

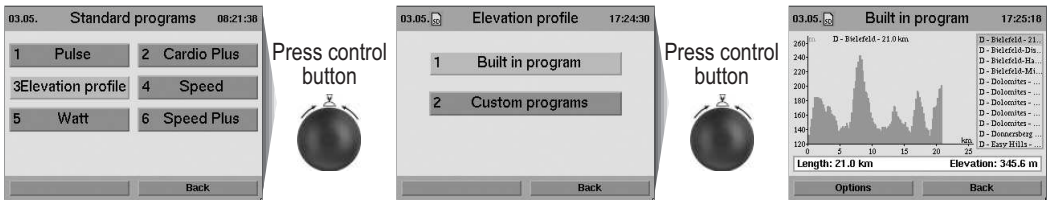
Pulse Rate Training Programs (Constant Pulse Rate)

With the pulse rate programs the heart pulse rate is controlled and adjusted automatically by means of the braking power.



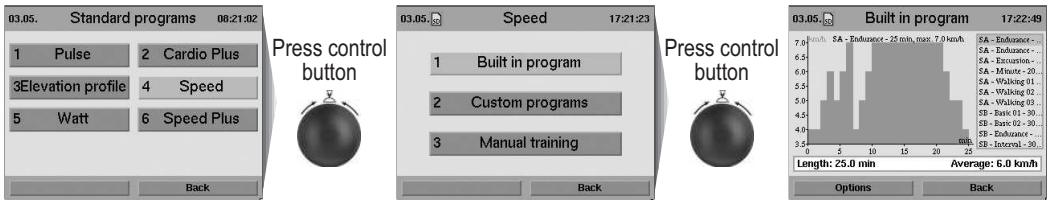
Elevation Profile Training Programs (distance programs)

The distance programs are varied, efficient, and simulate a realistic biking tour. Only here you have the possibility to use the gearshift.



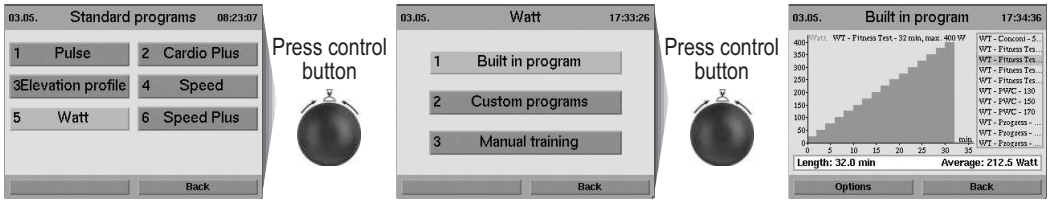
RPM Training Programs

With the RPM controlled programs the wheel speed in revolutions per minute is maintained at a level defined by the user.



Watt Training Programs

With the watt controlled programs the braking power is adjusted according to the set up watt value.



Use the Info key to obtain more information about the individual menu items.

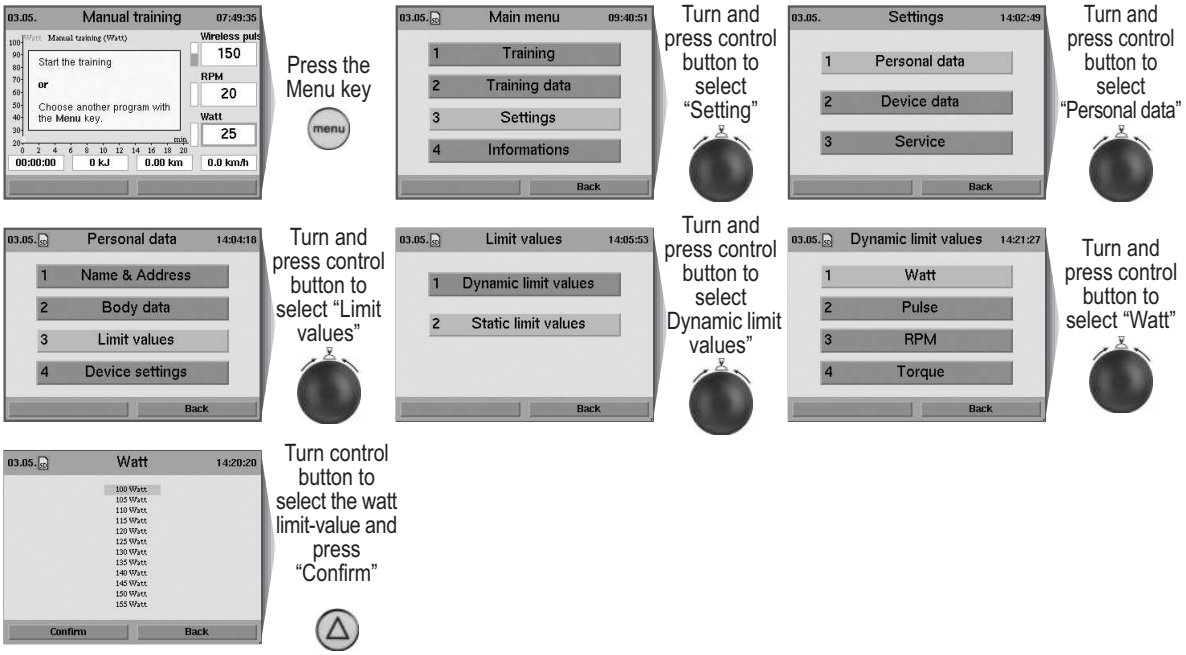
Setting Limit Values

In order to protect the user against overloading or physical injuries the training intensity can be controlled by various adjustable limit values. These should be set in menu “Setting” before starting training or before setting the loading values after a few training units.

“Dynamic Limit Values” and “Static Limit Values” can be set.

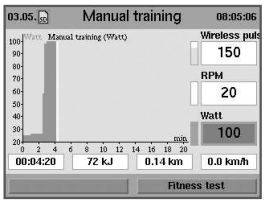
- Due to their natural variability, dynamic limit values are continually exceeded.
- Static limit values are reached only once per training.

Setting the Dynamic Limit Value for "Watt"

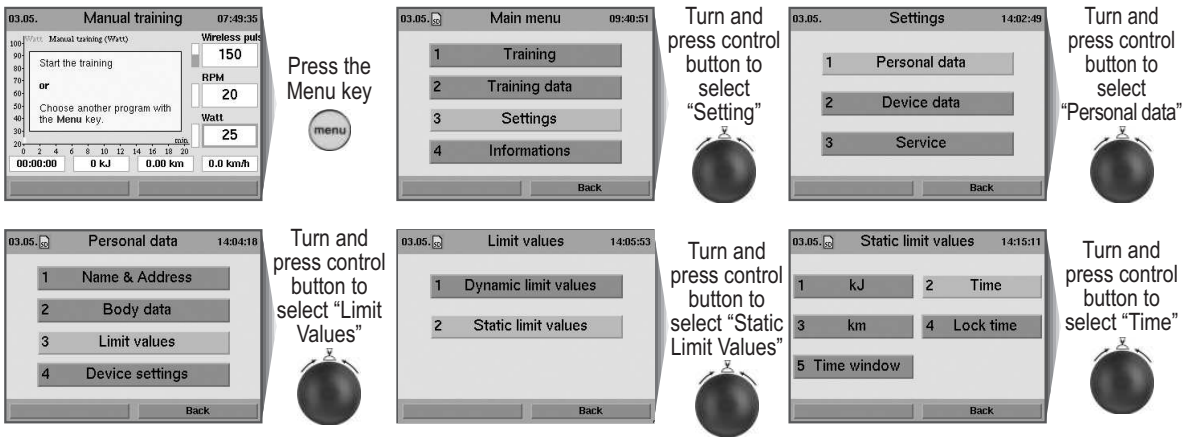


“Watt” limit value reached while training

The field displaying the watt value will be highlighted in **red** when the set “Watt” limit value is reached or exceeded during training. If the loading is reduced and thus falls below the limit value the warning is removed.



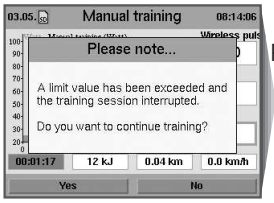
Setting the Static Limit Value for “Time”



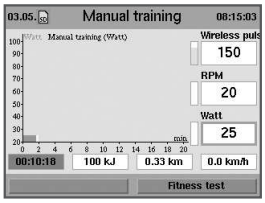
Turn control button to select the time limit-value and press the function key under “Confirm”

“Time” limit value reached while training

When the “Time” limit value is exceeded during training the braking load is automatically reduced to a minimal value. Simultaneously the system displays a warning message that must be acknowledged. The training can then be terminated or continued.

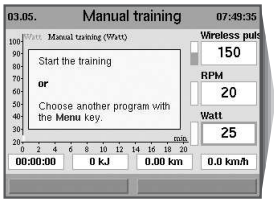


Press function key under “Yes”



Reviewing Stored Training Data

Recalling stored training data.



Press the Menu key

Turn and press control button to select “Training Data”

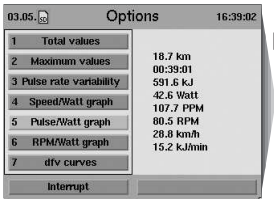
e.g. Individual Training

The individual training units can be recalled under several specific performance diagrams.

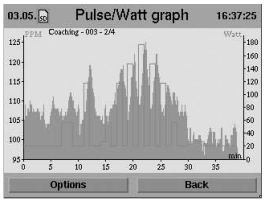
Press control button

Turn and press control button to “Select Training Unit”

Press function key under “Options”



Turn and press control button to “Select Diagram”



Use the Info key to obtain more information about the individual menu items.

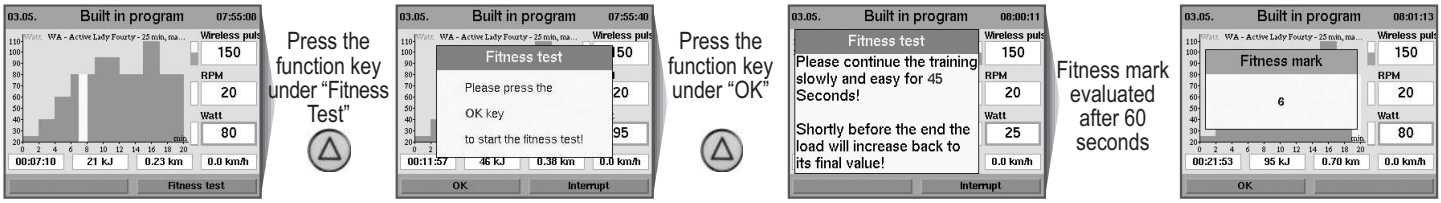
Fitness Test and Fitness Mark

The fitness test can be executed anytime during training. A pulse rate measuring device (pulse sensor, ear clip, or chest strap) must be connected and functional, and the training should had already started at least 10 minutes earlier.

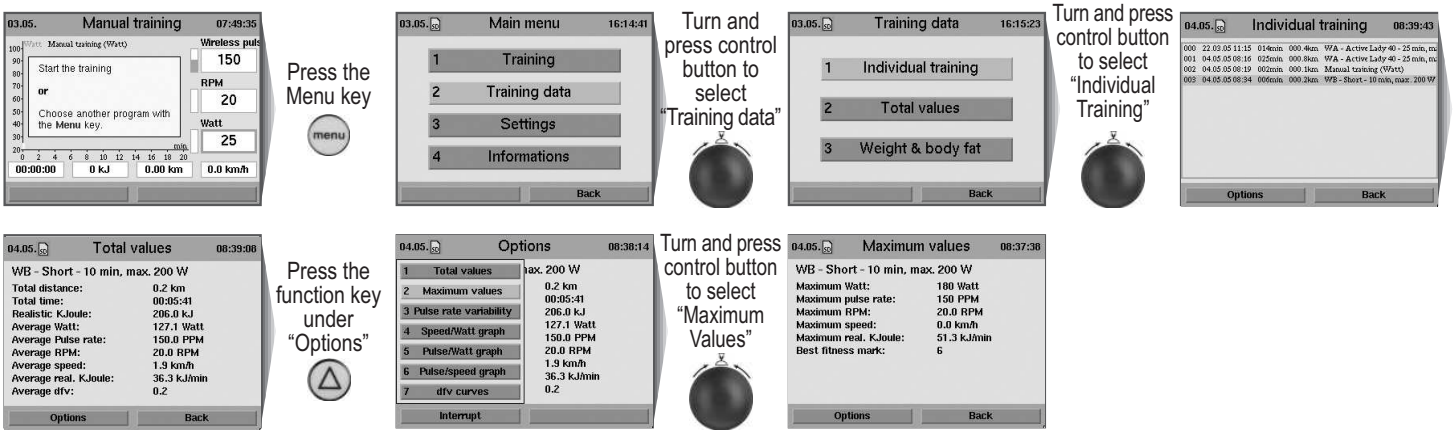
The measurement principle is based on the fact that the pulse rate falls faster within one minute (following a load period) for well-trained users than for less trained users. Fitness marks from 1 to 6 are assigned. The lower the fitness mark the better is the training status (fitness) of the user.

When the fitness test is started during training, the present training will be interrupted and the load will be lowered to minimum value for the device for a short period of time. During this pause the system measures the drop in pulse rate within a period of 60 seconds and computes a fitness mark. Afterwards the training resumes automatically at the interrupted position, and the load in Watt is raised to its previous value.

e. g. Fitness test during a training



Reviewing Fitness Mark

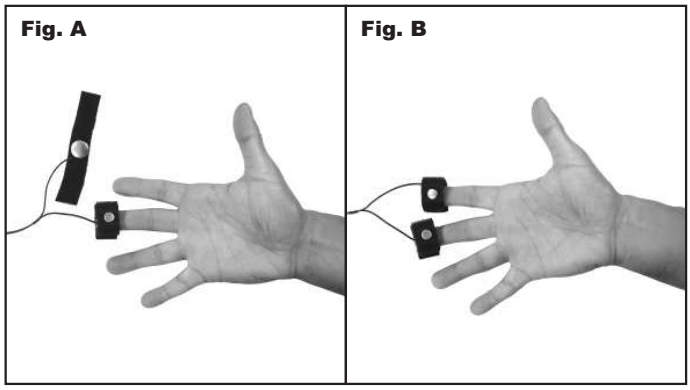


Relax-Function

The relax-function is a biofeedback-process that is measured over the electrical resistance of the skin. Biofeedback is thus the translation into perceptible signals of physiological processes occurring in our body whose values are indicated by means of optical signals.

The ergo_lyps controls the relaxation process by means of the relax-function, and highlights the process of stress elimination after a physical fitness training or other loading.

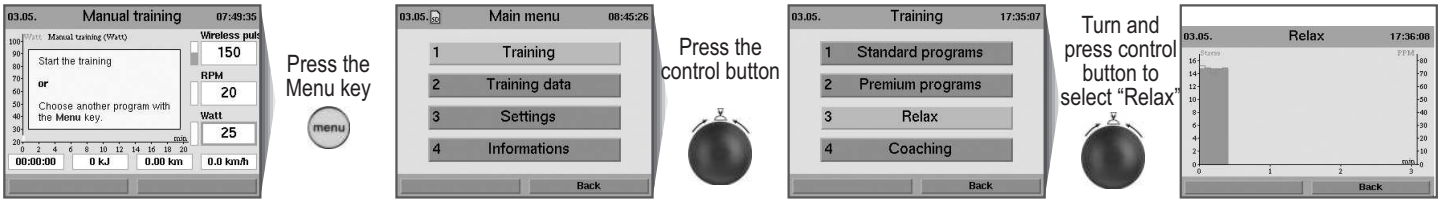
The displayed relax value drops gradually with increasing relaxation level and increases with the increase of stress level. You can assist this process by getting off the device and sit in a relaxed position, or even lay down, close to the ergo_lyps and calm down.



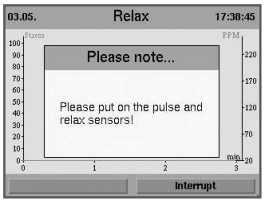
Connecting the relax sensor:

1. Attach the relax-sensor tape, with the big contact surface (Fig. **A**), to the fingertip of the middle and index fingers on the inner side of the hand (Fig. **B**). The Velcro tape should not be tightened too hard.
2. Plug the connector of the relax sensor into the "Relax" socket on the dashboard.

Calling the Relax-Function



A warning message will appear on the screen if you forget to put the relax sensor on.



Use the Info key to obtain more information about the individual menu items.

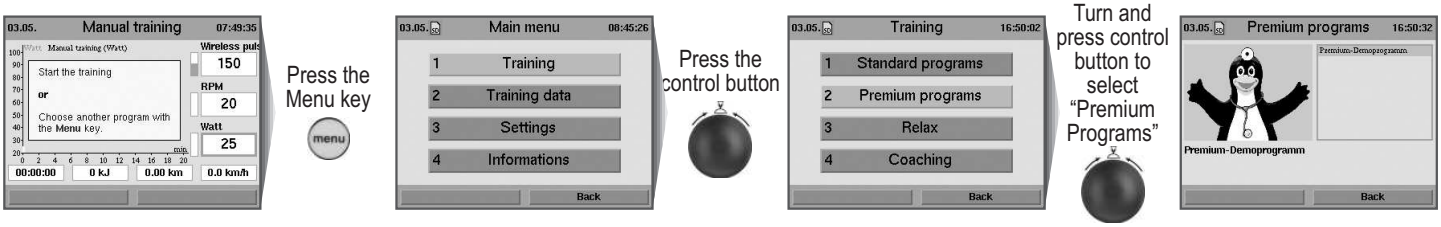
Premium programs

Premium programs are training programs with multimedia animation.

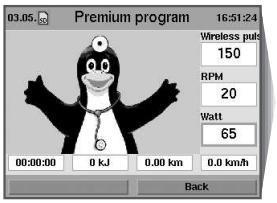
You will find at least one premium program on our homepage **www.daum-electronic.de** (menu option Support **Download**). In the near future more programs for various training targets will be posted.

Save the premium programs in the **folder "\data\premiumprogram"** on the **ergo_memo-card2**. Every premium program consists of a file with the extension **dpp** and the corresponding folder.

Starting the premium programs



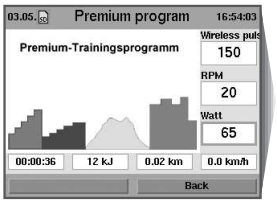
Select a premium program by turning and pressing the control button.
Each program has an introduction melody.



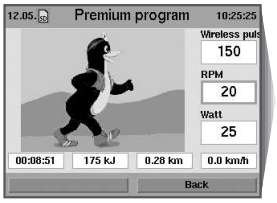
When a program is selected its introduction melody is played. The program starts automatically after a few seconds delay.

The program starts and the background melody plays.
"Welcome to your Daum premium series training device"

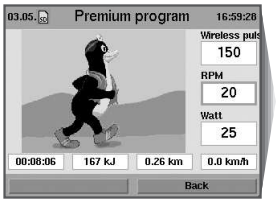
We start today's training unit with a gradually increasing load.
The second stage starts as soon as you reach your performance level:
Your pedalling speed will be raised gradually.
Following this warm-up in two stages the training continues in a natural landscape.
And finally ....



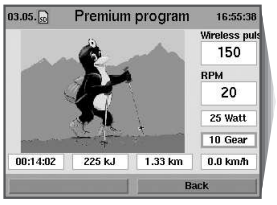
"Presently your training device is set for a load of 80 watts. And this load will be gradually raised to 125 watts within the next three minutes.
You should handle this load hands down!
And don't let my talking distract you - keep training!"



"So, you are already through the first level of your warm-up training. We will now gradually raise the speed of your training:
You should now hold a pedalling speed of 60 RPM for now – if you pedal too fast things get more difficult, if you pedal too slowly things get easier.
Only at the proper speed will your training be effective!"

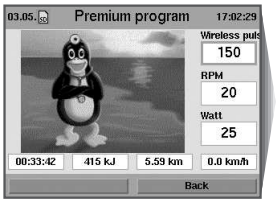


"OK now, let's go up in the mountains!
You can now decide at what speed you'll move forward with the plus and minus keys at the right edge of the screen.
Obviously the faster you go, the higher the load will be for you!
Whenever it gets too difficult for you use the minus key, on the other hand use the plus key if you feel underworked."



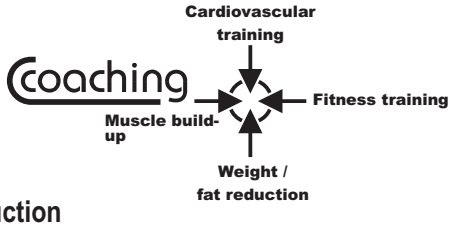
"You already have put in a very good performance.
We start now the softer last part, the heart rate training.
The selected heart rate range from 130 to 140 beats per minute is also well appropriate for fat burning."

.....etc.



"Our last 10 seconds..."
"Now you can be really proud of yourself! It was sometimes very tough. Congratulations – good work!"

Premium-Coaching



Indroduction

The “Coaching” concept introduces an intelligent training program offering the user four different training targets to choose from. The computer takes charge of the supervision and control of the training.

Users have various interests. Some users may wish to practice a special cardiovascular training for health reasons, while others may prefer fitness training or weight and fat content reduction, or even muscular mass development.

The ergo_lyps will compute and monitor an optimal training plan based on the available time and an individual fitness test. This training plan will be continually updated and adjusted through regular and automatic control of the training results to ensure an optimal training and success.

The ergo_lyps will input the physical condition of the user, and the training objective the user sets
for himself, and produces the correct training plan automatically.

- Coaching means: “Set your training objective and start training”. Everything else will be individually adapted to the user.

- Coaching is, when used properly and with discipline, a simple, very efficient, and logical program. The coaching program is the ideal training partner of any user who wants to train regularly with an ergometer.

It is important here to apply the program as much as possible in conformity with the training prescription issued by the computer for each user, and that the training objectives correspond to the needs of the user. Every user using this program, with regular training and proper programming, will experience a positive effect on his fitness level and his general stand toward training with an ergometer.

Fundamentals

The intelligent training program Coaching offers ergometer users the possibility to approach the training device without worries. The device takes care of all information and prescriptions to establish an optimal training model for the user. Instead of simply training “haphazardly”, users benefit from a professionally constructed training plan, taking into account their available time, their actual and individual capacities, and their personal objectives.

To optimally use this program you must take the following essential points into consideration:

1. All programs and training profiles were developed for healthy people. Users wishing to use the Coaching program are required to invest a substantial amount of time, to demonstrate endurance and willingness to perform, and to be disciplined. Therefore we urgently recommend that users undergo a thorough medical examination to determine their physical ability for sport activities before starting a training with the intelligent coaching program. Should a user feel ill during a coaching training, he or she should seek medical advice about physical activities and continuing the training.

2. The user is required to enter the amount of time he or she can or want to train (the number of training units per week), and to evaluate his own fitness level. The user should not overestimate his capacity regarding the number of training units and their difficulty grade. In sport activity overworking does not help, while a thoughtful and controlled training plan leads generally faster and more efficiently to its objective.

The same applies also to the self evaluation of the user physical performance capacities before starting Coaching. A user who evaluates his capacities at a lower level will achieve his training objectives safely and without overworking, even though in a longer period of time.

3. The user must take a performance test at the start of the Coaching plan, and then once every 4 weeks. The computer uses this test to determine the load prescriptions (e.g. the maximum load in watt and the maximum heart pulse rate during the training). This test is a full load test, and the user should only take it to the point where she or he can go without overworking or overloading himself.

Very important!
Please do not let your ambition pull you! you must absolutely avoid a physical overload!
Interrupt the test immediately if you feel the effort required is too high!

4. When used properly, the coaching program will not turn users into high performance athletes. The goal of this program is to preserve your health and to increase your performance capacities, and to make you globally “fit”.

5. The user must make a very personal decision before the start of a coaching program; which training objective is the most important for him. The main objectives of the coaching program are (see also the overview diagram “Coaching” at the beginning of the chapter):

- Cardiovascular training

- fitness training

- weight / fat content reduction

- muscle build-up

Subsequent changing of the training objectives is only possible under the provision of confirming a safety message (see the last part of the chapter “Changing the Coaching type”). This process starts a new Coaching and resets the actual pulse rate and watt upper limits as well as the Coaching week.

Premium Coaching leads you on an optimal path to the required training success based on the latest discoveries about sports activities.

Coaching prerequisites

The following basic prerequisites must be satisfied, and the important settings must be done on the
dashboard before the coaching program can be started.

- A user should train with the coaching program only with the pulse sensor (ear clip), or the Cardio
sensor chest band (see page 6), on.

- Since the program depends on many personal and exact data, if possible, all the required data and alarm values must be entered before starting the program for the first time. Take into consideration that, as a special case for the Coaching program, the data about the training duration (time), the distance (km), and the kJoule burned need not be entered. These values are computed by the computer of the ergo_bike for the Coaching program based on other data such as the training type, the training plan, and the training control.

Personal Performance Evaluation

The users must evaluate their very personal performance capacities (in 4 levels) in connection with the entry of the required personal data and alarm values, particularly for the utilisation of the coaching program. The directions provided in the following section should help the users evaluate their own performance capacities.

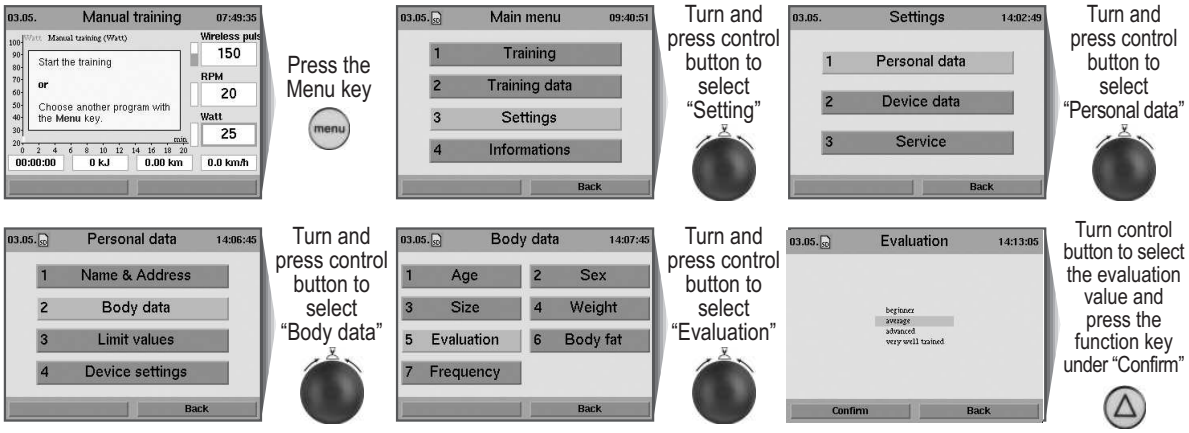
Beginner:
You don't have any training experience or practice physical activity only occasionally and very irregularly. In this case we recommend selecting the beginner category. This applies also for users who are returning from a long training interruption (e.g. because of an injury or an illness).

Average:
You do sport regularly. But you are mainly oriented toward recreational sport activities, less toward endurance sport. The training frequency is about 1 to 2 hours per week.

Advanced:
You do regularly endurance sport (e.g. jogging, biking, etc.). The training frequency is about 2 to 4 hours per week.

Very well trained:
You have an extensive training experience in endurance sport. Your physical performance and load capacity is above average. Your present training frequency is at least 3 hours per week, preferably in endurance sport.

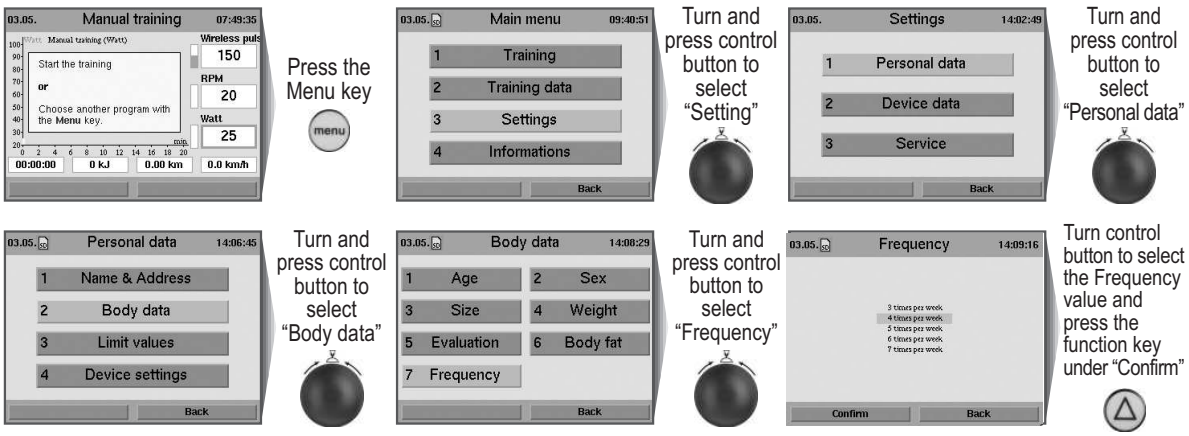
Entry of your Personal Performance Evaluation:



Training Frequency

By setting the training frequency the user sets the number of training units per week independently of the days. The user has the possibility to choose from "3 times per week" to a maximum of "7 times per week". In order to achieve the personal training objective the user must complete these training units. This guarantees that the Coaching program produces an efficient training plan with the prescribed training objective.

Entry of the Training Frequency:



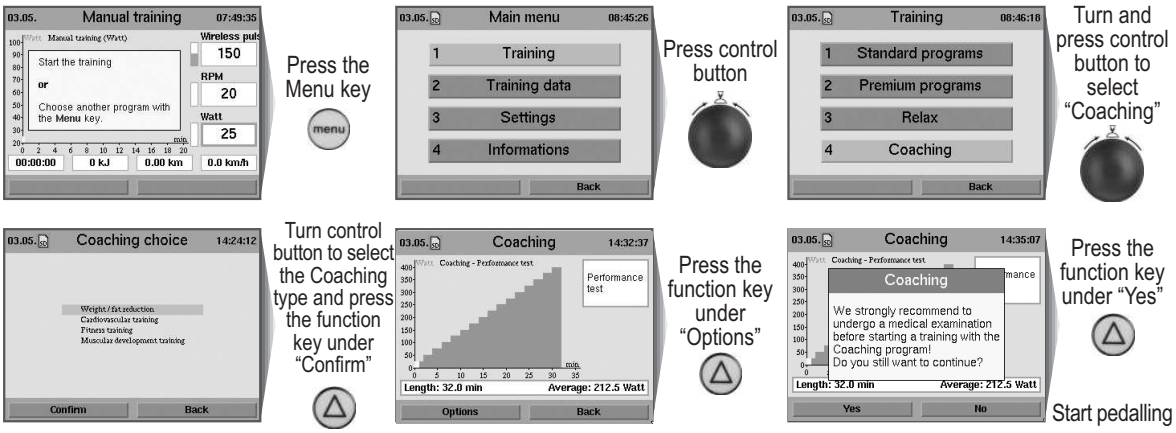
Coaching for the First Time

When the Coaching program is started for the first time it will ask the user to choose his personal Coaching type. Next the performance test can be taken immediately.

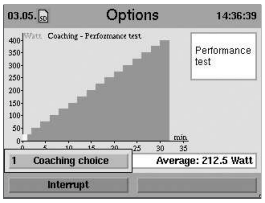
There are 4 Coaching types to choose from:

- Heart - circulation (cardiovascular)
- Weight and fat reduction
- Fitness training
- Muscle build-up

We urgently advise you to undergo a medical physical aptitude test before starting a training with the intelligent coaching program.



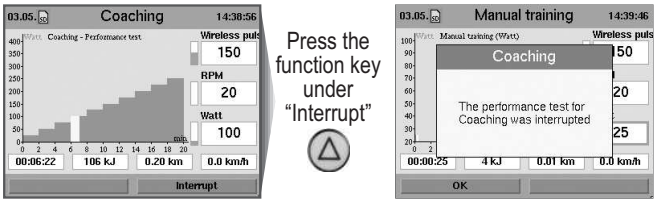
As long as the first performance test is not executed the Coaching menu will present the option "Coaching type".



Coaching Performance Test Interrupted

The first performance test is interrupted when the user press the "Interrupt" key or when the pulse rate upper limit is reached (performance limit reached).

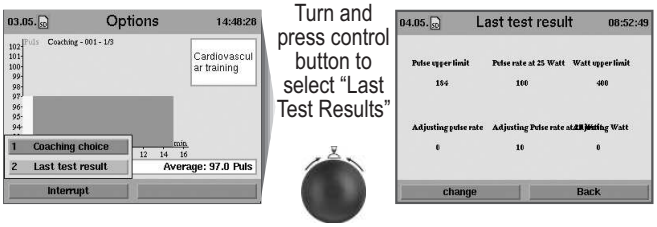
e.g. interrupted by user



Coaching Performance Test Successfully Completed

The values of load and pulse rate achieved are stored. Now the Coaching menu has the options "Coaching Types" and "Last Test Results".

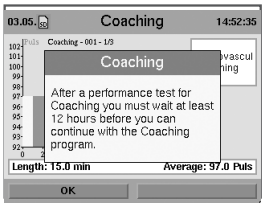
e.g. Recalling last test results



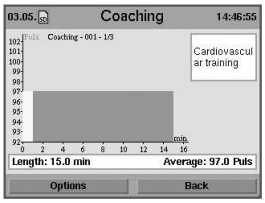
The user can change the values displayed by the "Last Test Results" option by doing an adaptation of the pulse rate and watt values. A warning is then displayed to inform the user that this is done at his own risks.

The Following Coaching Unit

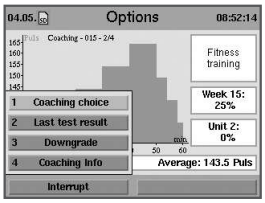
A period of at least 12 hours must separate the first coaching unit following a performance test and the performance test itself, because the user works out to his performance limits in the test. If the user tries to start before the end of this period a warning message is displayed.



Coaching week 1 begins on the day following the first performance test. The training progress is measured in Coaching weeks and is not related to calendar weeks.

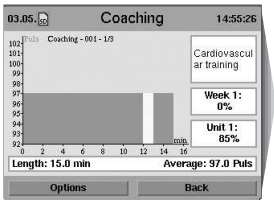


After the first Coaching unit is completed the Coaching menu will present all the options: “Coaching type”, “Last Test Results”, “Downgrading” and “Coaching Info”.

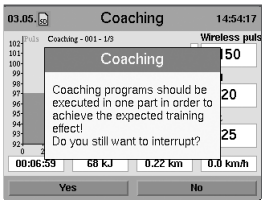


Interrupting the Coaching Unit

To successfully use the Coaching program you should complete the units each as a whole. If a unit is interrupted before reaching its end the system will display a corresponding warning message.

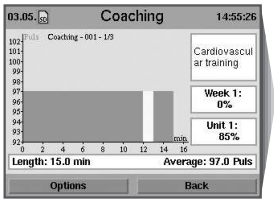


Press the function key under “Interrupt”

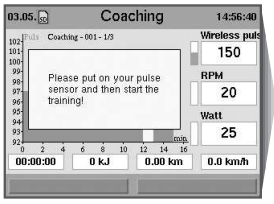


Resuming an Interrupted Coaching Unit

If the last unit was interrupted before it was completed, it must be completed first at the next training.



Press the function key under “Options”



Start Pedalling

Cool Down Programs - Starting with the “Advanced” Evaluation

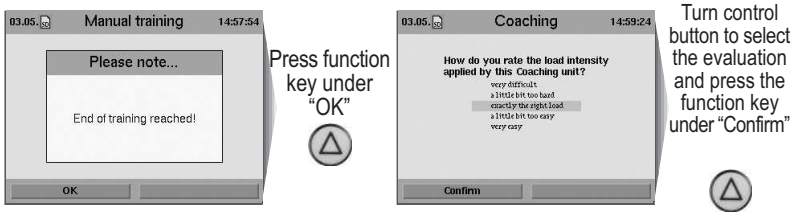
A cool down program is attached to every Coaching program starting with the “Advanced” Performance Evaluation and higher. If this program is interrupted in must not be resumed.

Personal Evaluation of the Coaching Unit

At the end of a training unit the user will be required to evaluate the effort (loading) imposed by that unit:

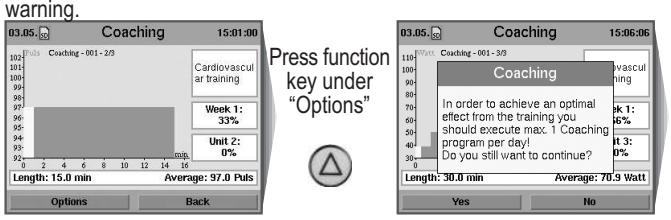
- too difficult
- a little too demanding
- just right
- a little too easy
- too easy

This evaluation is reflected in the load that will be imposed on the user.
You can review the adaptation values under the “Last Test Results” menu option.



Daily Planning for Coaching Units

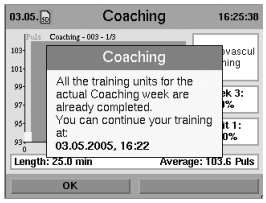
Only 1 complete Coaching unit may be run per day.
If the user tries to start a second one the system will display an appropriate warning.



Three to seven units may be run per week. The frequency can be set through the Menu.

Weekly Planning for Coaching Units

When all the Coaching units scheduled for a week are completed the Coaching menu will not allow any further training.
A warning message will be displayed to this effect along with the next scheduled program.

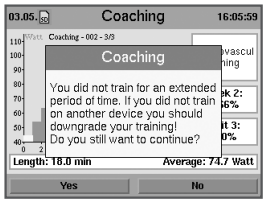


Displaying the Coaching Units

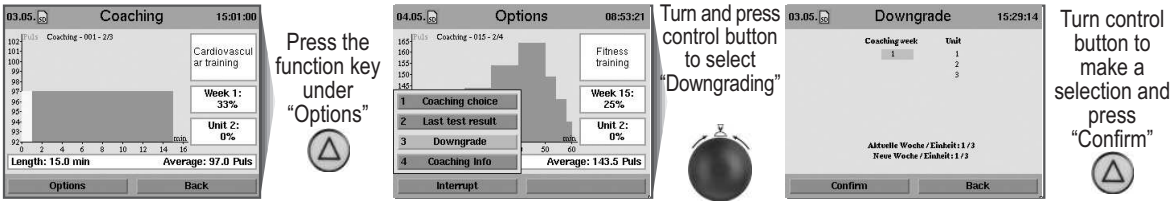
The units displayed for the selected week refer always to the presently selected number of training units per week.
As an example, the name of the displayed Coaching unit “Coaching - 001 - 2/3” means that this is the second unit in the first Coaching week, where 3 units are scheduled for the week.
Under training data you can review the corresponding graphs under this name.

Downgrading in the Coaching Units

If the training is interrupted for a period of 7 days, a warning message is displayed to inform you that you must downgrade yourself if you did not train on another location during this period.

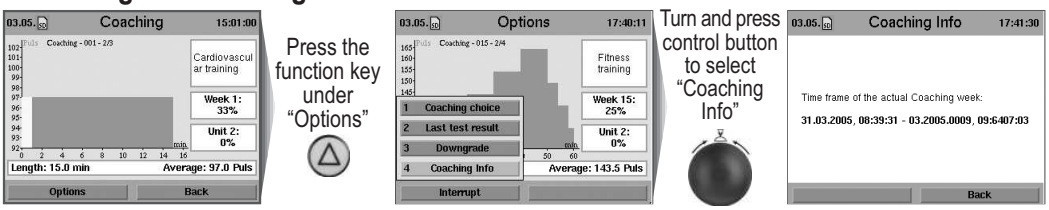


Use the Coaching Menu to downgrade yourself as follows:



When downgrading the actual week and the actual unit are displayed. You can downgrade yourself of any number of weeks and units.
Whenever a user downgrades himself, all the following, and eventually completed, training units will be reset to 0.

Reviewing the Coaching Info



Variable Coaching Settings

You can freely change the number of training units without restarting the Coaching program.
You can freely change your personal performance evaluation without restarting the Coaching program.

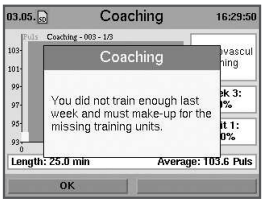
You can freely change your training target without restarting the Coaching programm.

Frequency of the Performance Test

The performance test is scheduled to run every 4 weeks and is executed as the last unit of the week (e.g. at the end of weeks no. 4, 8, 12, etc).

Missing Weekly Units

If at the end of a training week you run too few units the system will display a warning that the missing units must be recovered.



If too few units are run for at least three consecutive weeks, the system displays a warning suggesting to reduce the training frequency.

If the set frequency is already the minimum allowable frequency, the system displays a warning that you should train at least 3 times per week to achieve an effect from the training.

Use the Info key to obtain more information about the individual menu items.

System Software Update Using the Card

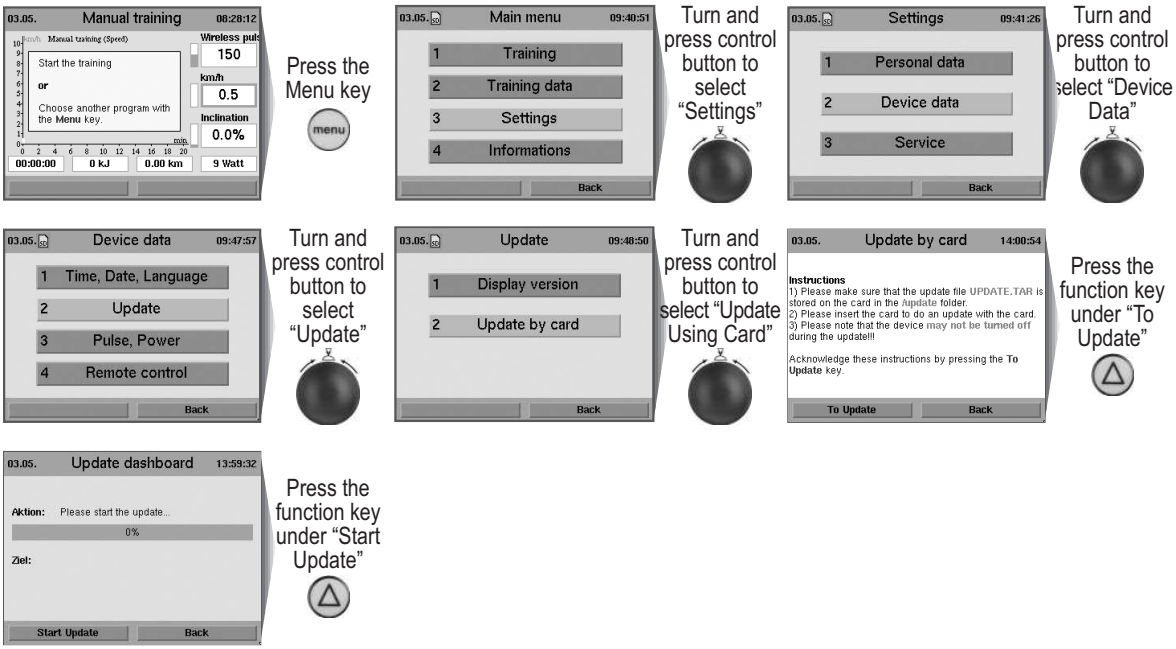
Since the system software is continuously updated and extended, it is possible to bring your present version to the latest state by means of a software update. This update is available directly from daum electronic in the form of an Update-Card, or as an Update file to download from our Internet site at “www.daum-electronic.de”.

Order the Update-Card directly from daum electronic; once the update operation is complete, you can use this card as an additional ergo_memo-card2 for another user.

If you prefer to use the possibility to update on Internet you will need a computer and a SD card reader (available from electronic stores or daum electronic).

Please make sure that the downloaded file “UPDATE.tar” is saved in the subfolder “/update” in the ergo_memo-card2.

Running the Software Update

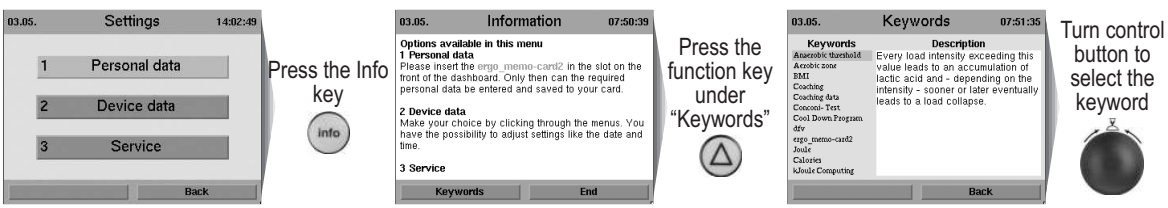


Use the info key to obtain more information about the individual menu items.

Keywords Glossary

The **ergo_lyps premium8** contains a glossary of key words for the concepts related to the utilisation of the dashboard and need a further explanation.
A short description is provided for each one of these keywords.

Viewing the Keywords Glossary



MP3-Player

Listen to your favourite music while training.

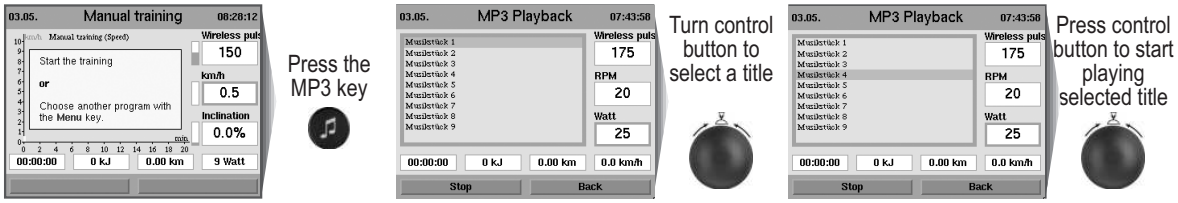
Save mp3 files on the ergo_memo-card2.
To do this you need a USB card reader connected to your computer, then save the mp3 files in the **"/mp3" folder** on the **ergo_memo-card2**.

Please note that you should not fill up the card with mp3 files, otherwise the system will not save any training data on the card!

Insert the memory card in the dashboard at the front side of the device.

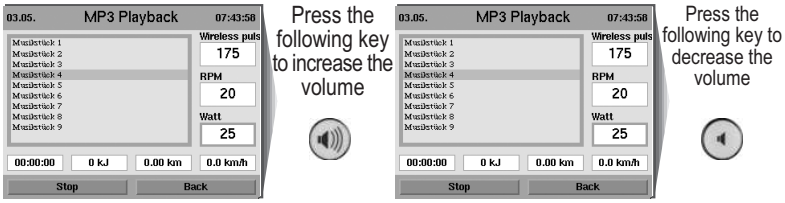
Starting the MP3-Player

Press the mp3 player key, the system will display a list with the music titles saved on the card.
Select a title by turning the control button.
Press the control button to start playing the selected title.

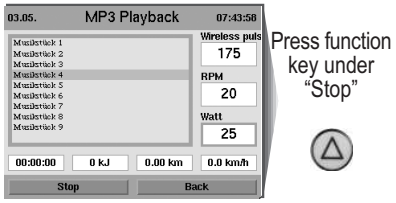


The system continues with playing all the music titles eventually following the selected one in the list.

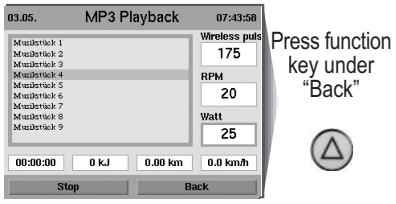
The volume is controlled by means of the 2 dedicated keys.



Press the stop key (left function key) to stop the music.



If you exit the MP3 player while the music is playing by pressing the "Back" key, you can continue to listening to your music while training.



Use the Info key to obtain more information about the individual menu items.

TeamAward

Your perseverance will be rewarded.

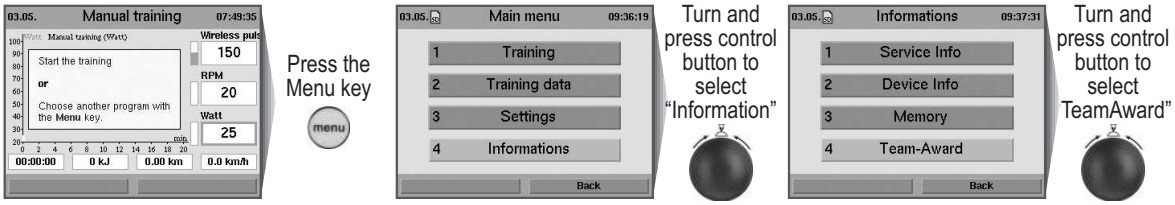
By training on this Ergometer you are automatically participating in the "TeamAward" contest of daum electronic.

When you reach one of many distance limits (1,000, 5,000, 10,000, and 20,000 kilometres) you will be invited to enter the TeamAward-Code on our Web site at **"www.daum-electronic.de"** under "TeamAward".
The code displayed for the devices of the premium series is composed of two parts (separated by a dash line). Please enter the first part of the code (before the dash) as the **"TeamAward-Code"**, and the second part as the **"serial number of the dashboard (8 digits)".**

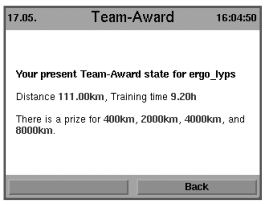
You can also reach us at the following address:

daum electronic gmbh
TeamAward
Flugplatzstr. 100
D-90768 Fürth

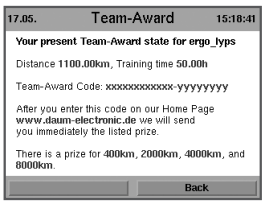
Recalling the TeamAward Code After the Training



You did not achieve the limit for a code yet.



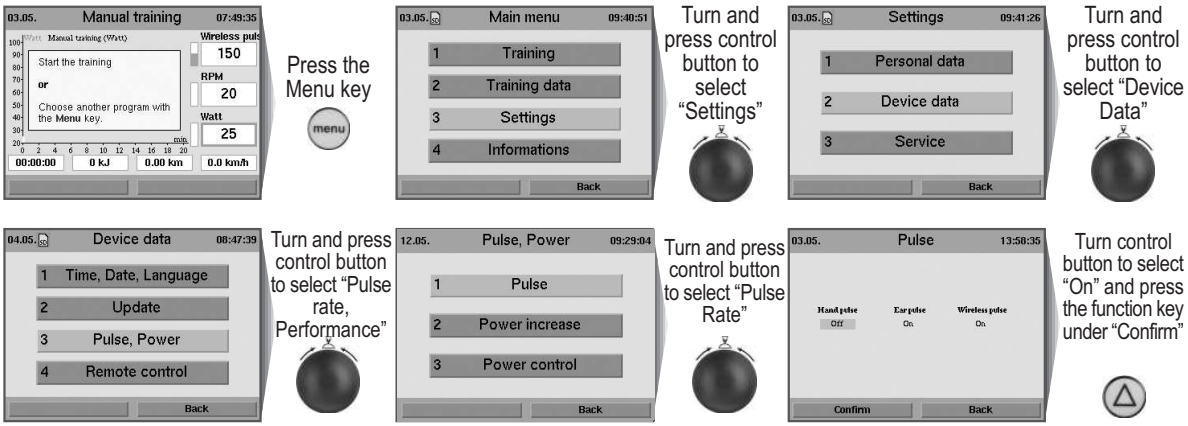
The TeamAward-Code is displayed after a distance limit is reached.



Use the Info key to obtain more information about the individual menu items.

Turning Hand Pulse Rate Measure ON

The hand pulse rate sensor is set to "Off" by the manufacturer. If you want to use the hand pulse rate measurement you must switch it "On".



Use the info key to obtain more information about the individual menu items.

Important Notes

Mains Voltage 230 Volts

Because of new regulations the mains voltage must be specified in the form of a definite value. Consequently, the mains voltage values indicated with a tolerance from 220 to 240 Volt will be restricted for all the ergometers of daum electronic to the single mains voltage value of 230 Volt.

Main Power Supply

In order to avoid all hazards any damages to the connection cable to the mains power supply or to the On/Off switch must immediately be repaired, or replaced with new parts, by the manufacturer, the customer service department of the manufacturer, or similarly qualified service personnel.

Trainings Hints

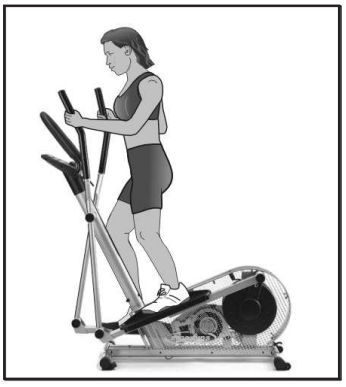
The ergo_lyps makes it possible to define and control the exercise sequence yourself.
It is thus possible to adapt constantly the training plan to the capacities of the user. This device is suitable for therapeutic use. **It does not meet the requirements for medical and diagnostic usage (in medical clinics).**

Ergometers are designed for endurance, kinesitherapy, and physical condition training, as well as for strengthening the cardiovascular system and increasing the muscle mass. The inclusion of the pulse rate in the parameters used to control the load enables training in the efficient aerobic zone.

Being in the aerobic zone means the muscles' loading is at the exact level where they can be adequately supplied with oxygen without overproduction of lactic acid (muscles' ache). Therefore, the ergometer is also a great value for sports medicine and physical education.

The fact that the training effort can be finely measured gives you the possibility to carry out physical stress tests to get information on your physical condition. You can thus identify early any cardiovascular problems and, with the help of a physician, set up a special endurance training-plan to deal with them.

A comfortable and relaxed posture is of great significance for the efficiency and the benefit of the training with the ergo_lyps as well as an appropriate shoe (sport shoe). Sports physicians recommend preparing for a training with relaxing exercises, which can be complemented with stretching exercises. If a user does not feel absolutely fit for the training should prepare himself for the training on the ergometer or, if in doubt, consult a physician.
A relaxed body posture is essential for the efficiency and the benefit of the training with the ergo_lyps. You should not be tensed up while training. You should wear loose training garments so that you don't get into sweat too easily and are not constricted by the clothes.
You should only train with sport shoes. These should not have a very hard or smooth (slippery) sole. We recommend a non slippery sole that is relatively soft and well structured. This type of shoe will give you a good stability on the coarse structure of the step plates, which must be maintained for your own security.



Trainings Hints

Generally speaking, training twice a week will help retain your physical condition level. To improve your fitness level you must train at least three or four times per week.

You should consult a physician before increasing the number of weekly training units, to avoid overloading yourself.

Environmental Conditions

Ergometers are not suited for operation in rooms and / or areas with explosion risks or in a combustive atmosphere. The devices may not be operated in the near vicinity of e.g. motors or transformers with big electrical connections because electric or magnetic fields may disturb or deactivate some functions. The vicinity of high voltage cables is also to be avoided.

Unless otherwise specified in the accompanying documentation and delivery documents, all the devices are designed to be used in the usual closed conditions under the climate conditions considered normal:
Temperature range: -10°C .....+40°C

The devices must therefore be protected against particular humidity effects. Ventilation opening must not be covered in order to avoid restricting the circulation of air. Storage temperature range: -20°C .....+50°C

All the devices may be stored for a maximum period of 6 to 9 months without being connected to an electrical power supply. Beyond this period the rechargeable batteries may loose their charge as a consequence of the lack of electrical power supply. If the storage period of the device exceeds this period, it will eventually need to be reprogrammed.

Used Symbols

The symbols used on the ergo_lyps premium8 comply with the IEC 417 and IEC 878 standards (table D1/D2).


Follow the Warnings / Danger Notices
Accompanying documents / instructions.


Device of type B


Dangerous electrical voltage


Alternating current


Protective cable connection


Ground


Potential equalisation


Recycling of old electric and electronic devices


read the operating instructions

Compliance to Standards

The ergo_lyps-premium8 may not be used if the certifications/approval and the defined safety standards (according to the table of the technical specifications) do not comply with the local prescriptions. The local country specifications must be compared with those of the device before using the device and the device may only be used if they comply with each other.

Outside cleaning

Clean the outside surfaces with a wetted soft cloth. Do not use any strong or corrosive cleaning solution, or one containing solvents, (e.g., alcohol, stain remover, etc).

Care should be taken to wipe out sweat drops after training (sweat attacks paint and plastic parts).
Damage caused by sweat is not covered by the warranty.

You can clean the coating of the handlebars with a mild detergent, applying appropriate caution.

Noises

ergo_lyps ergometers are equipped with quality ball bearings and silent belt drive. Still, it is unavoidable that you hear a few remaining noises in the range of up to LpA 52 dB (decibel).

Squeaking and cracking noises are generally caused by the loosening of the screws attaching the swivel joints, the oscillating poles / foot rods, the dashboard support column or the feet.

Fastening-Screws

All the fastening screws must be tightened up from time to time. We recommend tightening them at least after the first 50 km and then once every 500 km.

About the V-belt

The driving surfaces of the drive pulley and the V-belt pulley are covered with a rubber layer by the manufacturer.

This favours the development of an optimal fitting of the V-belt into the grooves of the driving pulley during the first 500 to 1000 kilometres.

During the first 500 to 1000 km the belt will loose some excess rubber, which will appear in the form of black powder deposits. You can remove these deposits using a small brush or a vacuum cleaner.

In the Case of a Failure ... What To Do If?

IIn the event of a failure, please check if:

- The data cables are correctly connected.

- The cable connectors are firmly plugged in.

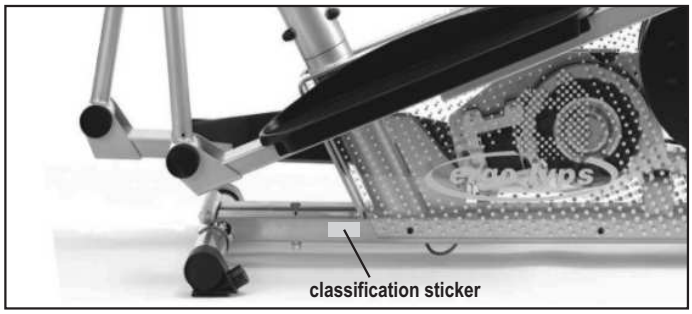
- The cables were jammed or damaged during the assembly of the dashboard on the handlebars column.

Contacting your dealer or the service department of the ergo_lyps

If the cause of the failure could not be identified, you should contact the dealer, where you bought the device, or daum electronic gmbh.

We need the following information:

1. The device number (this number is on a silver label on the front lower part of the frame).



2. The dashboard version number (you can access this number under the menu item “Main Menu” - “Information” - “Device info”).
3. The proof of purchase and the device reference sheet.
4. ergo_lyps ergometers have a built-in failure diagnostic system, which signals device functionality using a red and a yellow LED.
These LED’s are located in the rear area (on the left side when looking in the front direction), on the module within the housing. You can see them from outside through the side cover. With the device switched on, the yellow LED should blink when pedalling slowly, and blink faster when pedalling fast.
The red LED should light up for a short period of time when turning the power switch ON and OFF.

Please inform us of the status of these LED’s for all complaints concerning “the device is not braking” or “the device is not braking properly.” This enables us to draw relatively concrete conclusions about the cause of the failure.

If you wish to obtain more information on your device, please visit our service and repair hints site on Internet (www.daum-electronic.de).

Should the dashboard operation fail and cannot be restored by mean of normal keys operations, then the solution would be to press the recessed RESET key (Page 7/No. 17) underneath the dashboard with a pointed tool (e.g. a pencil or ball pen).

Please note that the last set of training data and results will be definitively lost when you press the RESET key.

EC Declaration of Conformity

We declare under our sole responsibility that the

product: **ellipse ergometer**

model: **ergo_lyps Premium 8**

article number: **9150282**

complies with all applicable requirements of the following prescriptions:

2004/108/EG EMC Electromagnetic Compatibility

2006/95/EG Low Voltage Directive

Applied standards:

EN 957-1:2005

EN 60601-1-2:2007

EN 60335-1:2007

daum electronic gmbh
Flugplatzst. 100
D-90768 Fürth
Tel.: ++49 (0)911 / 9 75 36-0
Fax: ++49 (0)911 / 9 75 36-96

Fürth, 18/12/2009

CE

Specifications

GB

Braking system:	Computer-controlled, full electronic eddy current brake (operating in the speed ranges shown in the diagram on page 38)
Load range:	20 to 400 Watt
Speed range:	0 to 200 RPM
Load precision:	Conform to DIN EN 957 1/-9 Class SA/HA
Loading levels:	In 5-Watt increments, manually adjustable
Drive:	Single-stage, maintenance-free V-ribbed belt drive in a spring supported drive unit.
Flywheel:	Precision machined
Displays:	Colour screen 256 Colours 320 x 240 / 76800 Pixels
Pulse rate measurement:	On the ear, measuring range 40 to 200 pulses/min. Telemetric using the Cardio sensor chest strap (available as an optional accessory), and over the pulse sensors integrated in the U handle
Alarm signals:	Acoustic and optical
Weight:	approx. 75 kg
Dimensions:	L 105 cm , W 55 cm and H 155 cm
Power supply:	230 V alternating current, 50 Hz, 65 W
Safety class:	2

Safety Requirements

Conformity to the Technical Plant and Equipment Act

daum electronic gmbh hereby declares that this product complies with the following provisions regarding electromagnetic compatibility and electrical safety:

- 89 / 336 / EEC of May 3, 1989 including subsequent changes (Recommendation 92 / 31 / EEC of April 28, 1992 and recommendation 93 /68 / EEC of July 22, 1993)
- 73 / 23 / EEC of February 19, 1973 including subsequent changes (Recommendation 93 / 68 / EEC of August 30, 1993)
- 02 / 96 / EG of January 27, 2003 about Recycling of old electic and electronic devices
- 03 / 108 / EG of December 8, 2003 of changes (Recommendation) 2002 / 96/ EG about Recycling of old electic and electronic
- EN 60601-1-2 (EMC, Generic Emission Standard, Part 1: Residential,commercial, and light industry)

Technical Safety Recommendations:

Compare the supply voltage indicated on the nameplate located on the housing with your local supply voltage prior to plugging the power cord to the power supply. Please contact you dealer if the values are not the same.

The device is completely disconnected from the power supply by pulling out the power cord, therefore it should always be plugged into an easily accessible socket.

Area of Application:

The device is suitable for professional and/or commercial utilisation (complies with DIN EN 957 1/-9 Class SA/HA).

It does not meet the requirements for medical diagnostic applications (clinical use).

The maximum allowed weight capacity is 120 kg!

CE

Assembly and Installation Guide

Assembly Notes

Please make sure that no parts are missing (see package content list) and whether any deterioration occurred in transit. Please contact the company daum electronic gmbh in case of trouble.

Please assemble the device as shown in the picture sequence in the following assembly and installation guide.

Please keep in mind that a risk of injury exists with any use of a tool. You should therefore work carefully and cautiously when assembling the device, and also do not leave any tool lying around.

Please dispose of all packaging material in a safe way. Keep all foil and plastic bags away from children - **suffocation risk**.

If in doubt, ask another person to help you with the installation. You will find all needed tools and hardware in the small parts bag. Start by loosely assembling the parts together, without tightening the screws, and check whether they fit correctly. Then firmly tighten all the parts together.

The ergo_bike should be installed on a level ground. The manufacturer is not liable for any damage done to the floor. Particularly with soft floor surfaces (e.g. PVC, etc) where pressure spots will form after a short period of time.
We therefore recommend installing and using the device on a protective base. Appropriate protective bases can be ordered from daum electronic gmbh.

It is not intended for use in rooms with damp conditions. This could cause rust to build up on the ergo_lyps, which would damage device parts and impair both the operating functions and the safety features.

The ergo_lyps functions with a mains voltage of 230 Volt, 50 Hz and has a power consumption of 65 Watt. The power supply you wish to use must satisfy these requirements!

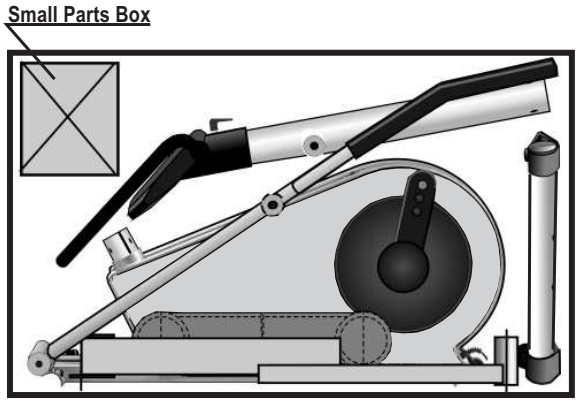
Package content

Please make sure no part is missing

When unpacking the device, make sure you remove the separate parts carefully from the environmentally friendly cardboard box. Not only to avoid personal injuries, but also to avoid any damage or loss of parts.

The device:

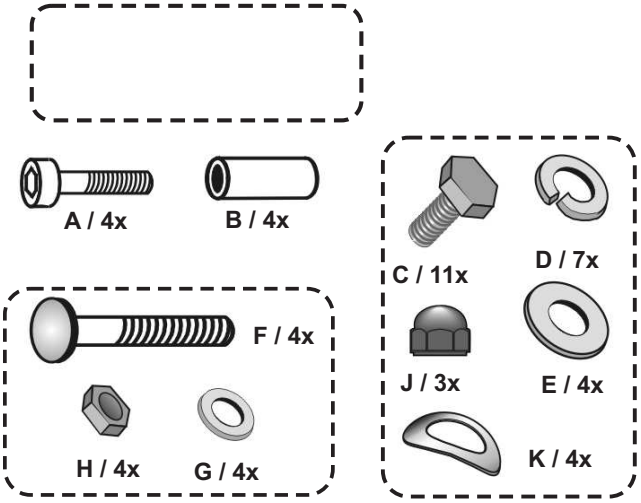
1 ergo_lyps base frame with drive unit
(with installed crank levers and cover plates)
1 dashboard stand with dashboard & U shaped handle
2 feet set
2 Oscillating poles / right and left
2 Top handle with coating and caps
2 Foot rods / right and left
2 Step plates with corresponding screws
2 Bearing shafts for the oscillating poles (right and left)
2 Bearing shafts for the crank lever (right and left)
1 Drinking bottle with holder and screws
8 Swivel joint caps



ergo_lyps Package contents

Mounting hardware:

4 Recessed head screws M 8x50 (A)
4 Spacer sleeves 12 Ø x 37.5 mm (B)
11 Hexagonal head screws M8 x 20 (C)
7 Spring washers DIN 127 - 8.1 (D)
4 Washers DIN 9021 8,4 (E)
4 Flat head screws M5 x 40 (F)
4 Washers DIN 125 5,3 (G)
4 Hexagonal nuts M5 (H)
3 Dome nut for hex. head screws M8 (J)
4 Curved spring washers ET3159 (K)
2 Screws 3.5 x 25 (L)



Tools:

1 Wrench 8 mm
1 Wrench 13/17 mm
1 Allen wrench SW 6

Accessories:

1 ergo_memo-card2
1 Pulse sensor Ear clip
1 Relaxation sensor
1 User manual and installation guide

1. Assembling instructions / Installing the feet

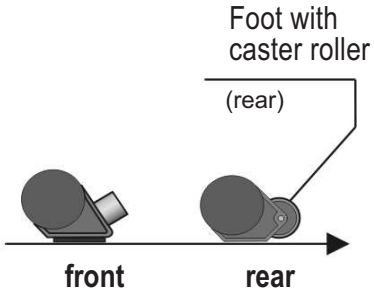
Required hardware: 4 x recessed head screws A
4 x spacer sleeves B

Required tool: Included SW 6 Allen wrench

Pull the main device from the package and put it down in an upright position.

Install the **foot with casters** at the rear (under the U shaped perforated plate)
Install the **foot with adjusting screw** at the front

The caster and the adjusting screws must be pointing to the rear!



Assembling the device

1.3 Slide each of the spacer sleeves B around one of the 4 recessed head screws A respectively.

1.4 Lift the main device (1) from the rear to install the rear foot. You could also put the device on a table, a trestle or any other raised surface. The frame's cross bar should protrude from the supporting surface to simplify the manipulation. (We recommend letting a second person help lift and hold the device.)

1.5 Put the foot with casters in the rear crossbar and align the holes to the threads in the crossbar.

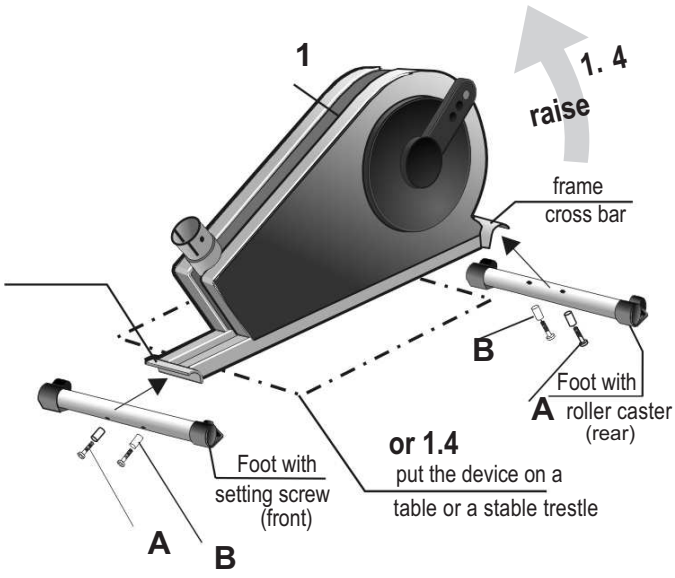
1.6 Insert the first recessed head screw with spacer sleeve into one of the holes and screw it in lightly.

Do not tighten the screw yet, and do not use force to screw it in!

1.7 Repeat this operation with the second recessed head screw with spacer sleeve (as described under step 1.6).

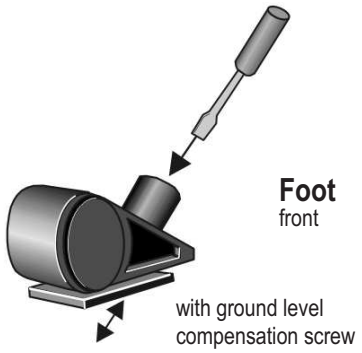
1.8 Tighten the recessed head screws.

1.9 Lower the device with the attached rear foot, and lift it in the opposite direction (to the rear), or if your are working on a table, let the front crossbar protrude from the table surface.



1.10 Proceed with mounting the front foot in the same sequence described in steps 1.6 / 1.7 and 1.8.

1.11 If the ergo_lyps is installed on an uneven floor, use a screwdriver to adjust the compensation setting in the front feet to ensure a stable stand.



2. Assembling instructions / dashboard support with the dashboard

Required hardware: Dashboard support (3) with the cable 1e
incl. the pre-installed dashboard, the U shaped handle
and the locking lever

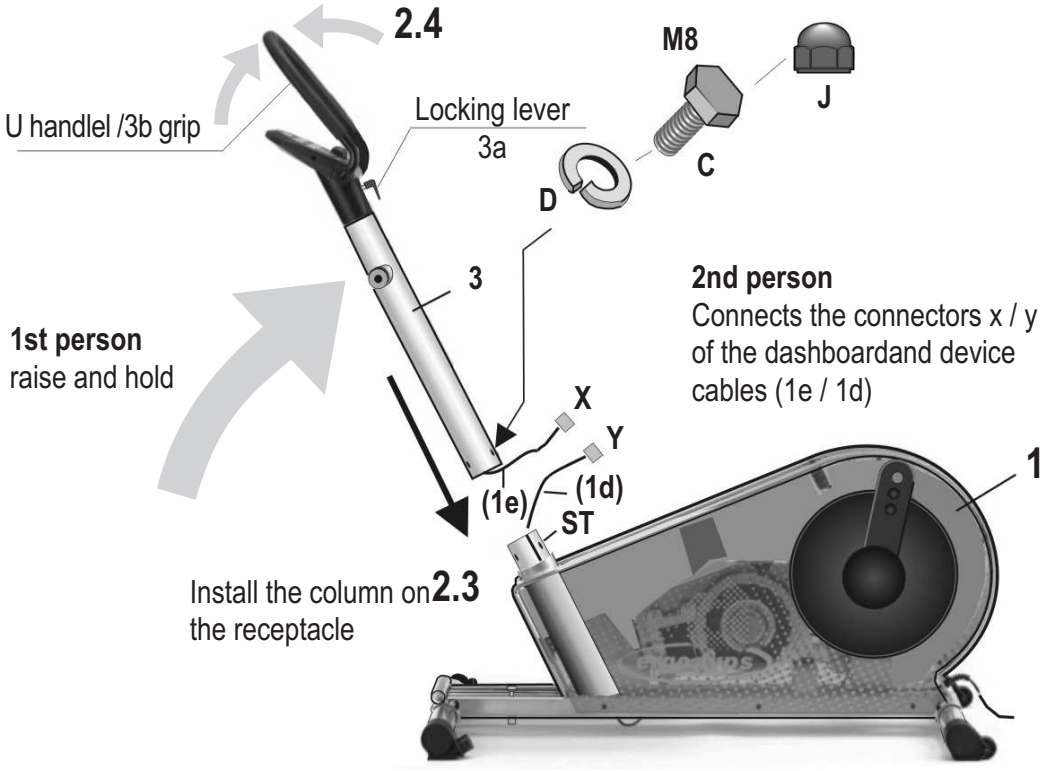
Required tool: Wrench 13

2.1 When unpacking the unit, lay the dashboard support (3) with the mounted dashboard on a level and clean surface.

2.2 The dashboard cables (1e) protruding (sticking out) from the lower end of the support column (3) must be connected to the device cable (in the receptacle of the support / ST) before the dashboard support (3) can be installed on the base frame (1). The connectors (X & Y) must be plugged together. This operation cannot be performed by a single person. Given the relatively important weight of the dashboard support column, a strong person should hold the support column (3) with the dashboard cable (1e) sticking out close to the receptacle on the frame (ST). A second person plugs the connectors (X & Y) together. Then they together install the dashboard support column (3) carefully on the receptacle (ST) of the frame. Take care at this moment not to jam or separate the cables.

2.3 After the support column (3) is loosely installed, it must be oriented to align the holes to the threaded holes in the receptacle (ST). Then screw in the three M8 screws (C) with the supplied spring washers (D) without tightening. We recommend tightening the three screws (C) of the support only after all the parts have been installed (particularly the oscillating poles and the foot rods) and adjusted. Then you can cover the heads of the screws with the supplied caps (J).

2.4 Then you can adjust the U shaped handle/grip (3b) and put it in the required position. The holding grip (U shaped) handle is hold in position by tightening the locking lever (3a).



Warning! Avoid jamming or separating the dashboard cable (1e / 1d) in the receptacle (ST).

3 Assembling instructions / Assembling and installing the oscillating poles

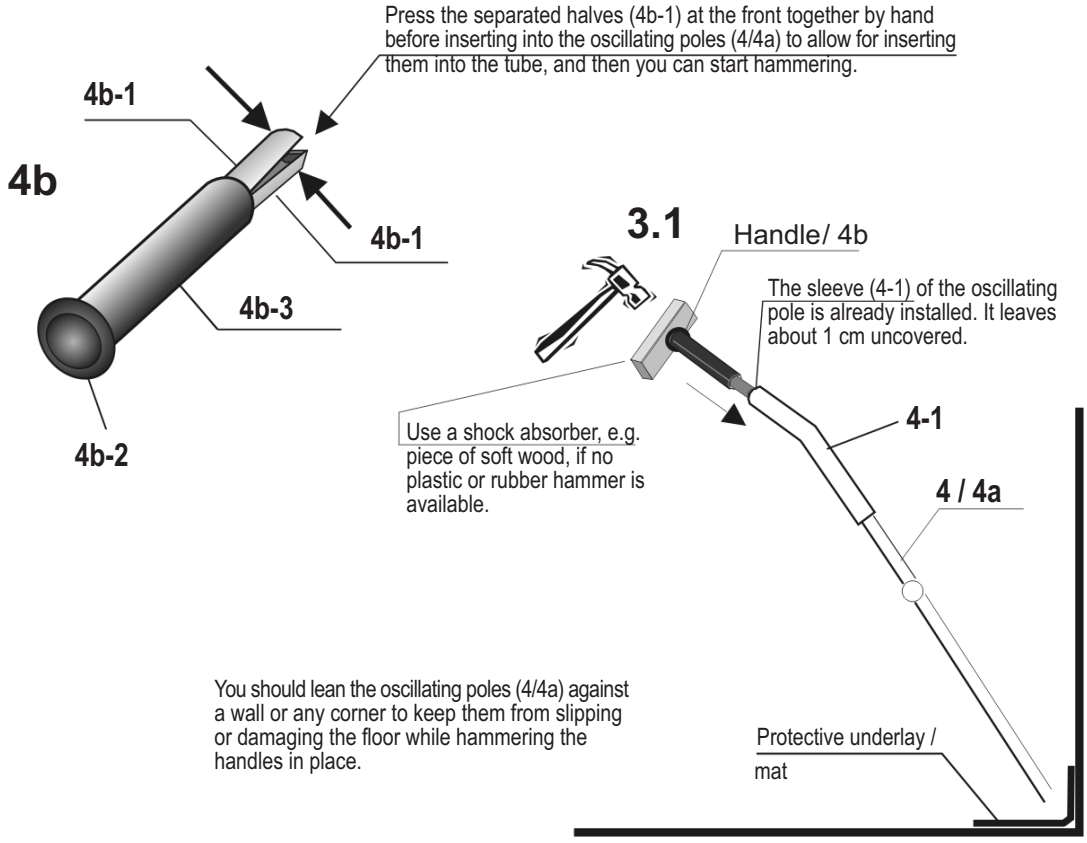
Required hardware: 1 oscillating pole (4 / 4a) right /left with the handle padding (4-1)
2 Handle extensions (4b)
2 M8 screws/C, 2 washers/E, 2 spring washers/K

Required tool: Wrench 13

3.1 The oscillating poles (4/4a) have special handle extensions (4b) to reduce the packaging size. The extensions (4b) must be assembled to the poles (4/4a) before installing them. Since these extensions (4b) are held in place on the poles by friction only, they must be installed by hammering in position with a plastic or rubber hammer, or with a normal hammer with a shock absorber (wood or plastic pad) between the hammer and the handle. The handle padding (4-1) of the oscillating poles (4/4a) must neatly meet that of the handle extensions (4b) and not form a gap between them.

3.2 The extensions (4b) are made up of two similar halves (4b-1/4b-1) that are held together by a sheath. You will have to pull the supplied sleeve (4b-3 / elastic rubber tube) over the two halves (4b-1). The end caps (4b-2) hold the halves together once they are hammered into the oscillating poles and prevent the two halves from separating.

3.3 We recommend to proceed as illustrated below to hammer the extensions (4b) into the oscillating poles. The best proceeding is to find an underlay (foot mat or similar) and to lean the lower end of the oscillating pole into a wall corner in such a way that the rounded bearing cannot slip on the ground and prevent it from being damaged. Put the two halves (4b-1) together by hand or using a big pliers, to allow for inserting them into the tube of the oscillating pole. In doing this you should pay attention to avoid putting the longitudinal ribs of the handle extensions shaft do not come into contact with the internal tube seam. You should start hammering only after the extension halves are inserted into the tube. Otherwise you would damage the shaft of the extension handles (4b).

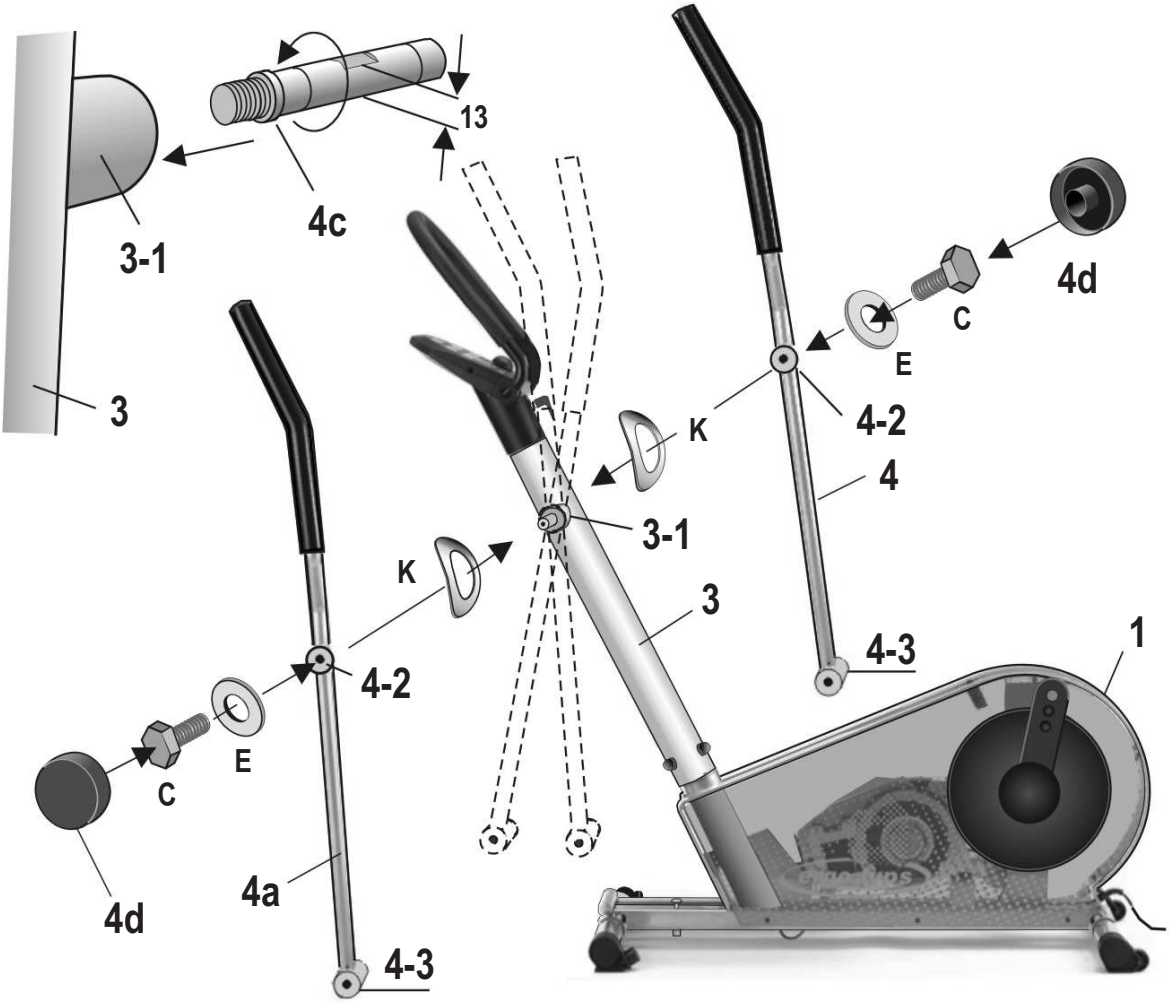


3.4 Use the 13mm wrench to screw the two hinge pins (4c) in the threaded holes on the right and left sides of the dashboard support column (3) and tighten them in place. The 13mm wrench adapts to the 13mm recess on the pin shaft.

3.5 Each of the oscillating poles (4/4a) is fitted with two bearing brackets. Mount the bearing bracket in the middle (4-2) on the corresponding left and right hinge pin (4c) of the dashboard column (3) as shown in the drawing below. The curved washer (K) supplied in the hardware kit must be fitted on the hinge pin (4c) before the pole. This washer then sits between the welded bearing support (3-1) of the dashboard column (3) and the bearing bracket (4-2) of the oscillating pole.

3.6 Attach the oscillating poles (4/4a) to the hinge pins (4c) with the hexagon head screw (C) and the washer (D). At this moment, the screw should be screwed loosely (not tight) using the supplied 13mm wrench (see 4.5 page 10 for the final tightening of the screw).

3.7 Put the right/left protective caps (4d) on the M8 screw heads on the right and left sides after their final tightening (see 4.5 and 4.6 / page 33).

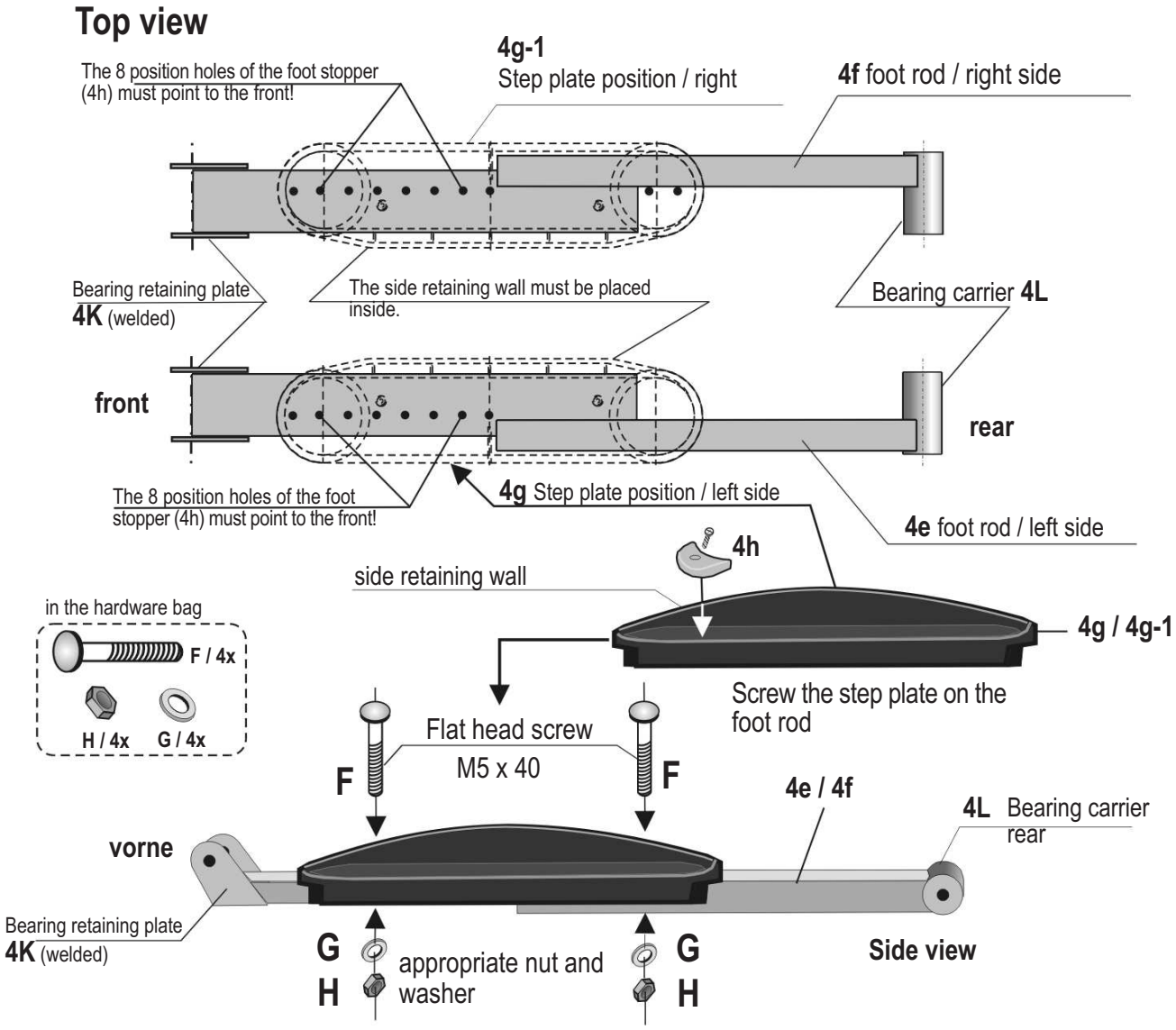


4 Assembling instructions / Mounting the foot rods with step plate

Required hardware: Foot rods (4f/4e) with welded bearing carrier and bearing retaining plate
Step plates (4g left and 4g-1 right) incl. mounting hardware from the hardware kit and positioning stops (4h)

Required tool: 8mm and 13mm wrenches

4.1 The step plates (4g/4g-1) must be screwed in place first before the foot rods (4f/4e) right and left can be mounted. This step plates are **not** identical! The difference is in the position of the **8 position holes** of the foot stopper (4H). The holes must point to the front (see illustration below). The step plates must be properly identified before installation on the corresponding right or left foot rod (4f/4e). Insert the flat head M5 screw (F) from above through the step plate (4g/4g-1) and the corresponding holes in the foot rods (4f/4e) and secure (screw) it from underneath with the M5 nuts (H) and the appropriate washers (G). You only have to pay attention that the side retaining wall on the step plates (4g/4g-1) is positioned on the proper side of the foot rods (4f/4e). The retaining walls must be mounted towards the device body. They may not be positioned outwards.



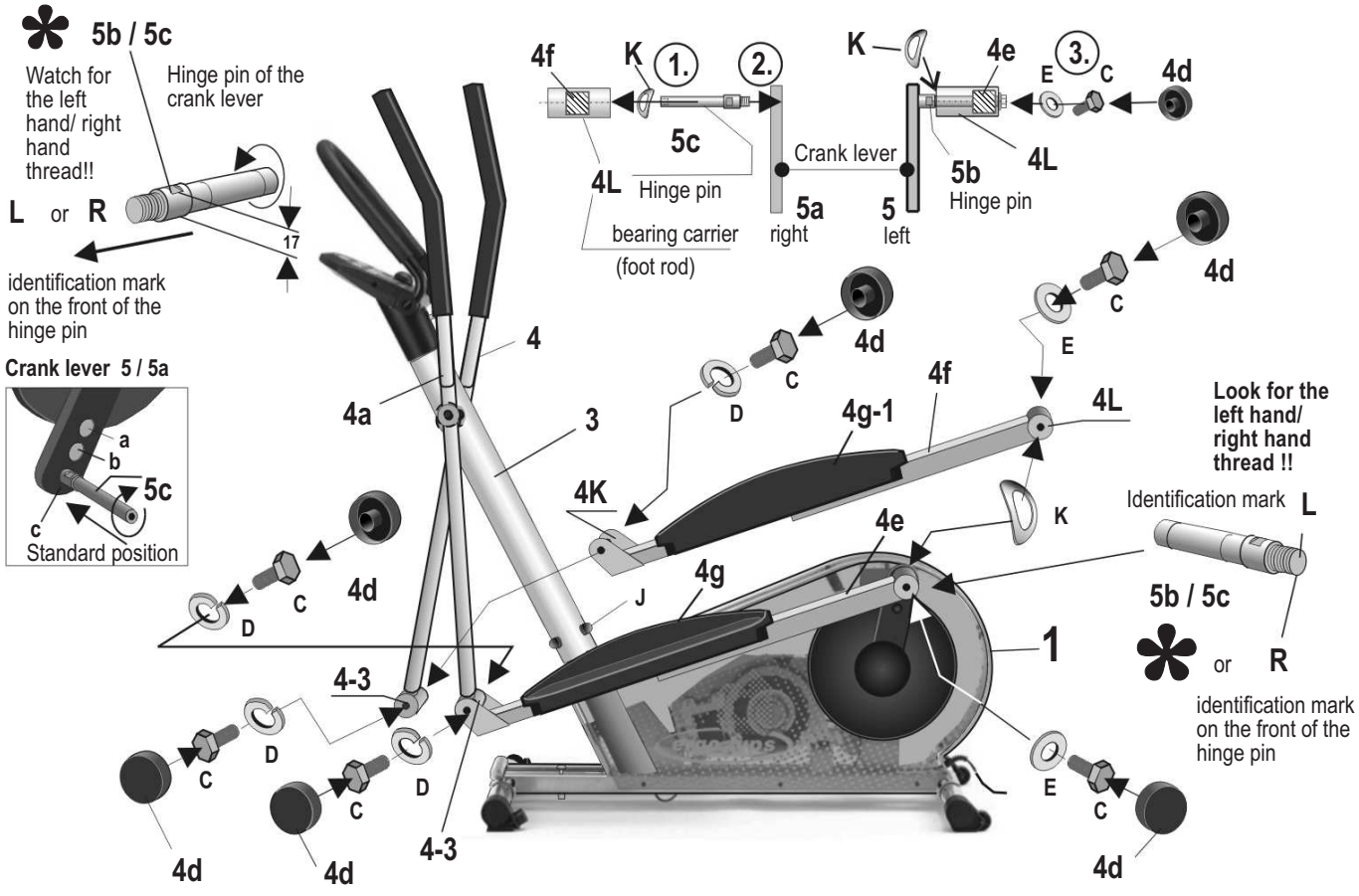
4.2 Insert the hinge pins (5b / 5c, look for the **R or L * identification mark**!), with the thinner half (the internal thread) in front, in the corresponding bearing carrier (4L) on the rear of the right and left foot rods (4f/4e). The curved spring washer (K) must first be fitted over the thinner and longer side of the hinge pins (5b/5c). This spring washer (K) musts be inserted between the bigger rim of the hinge pins ant the inner side of the bearing carrier (4L) (1.).

4.3 Mount the foot rods (4f/4e) respecting the side orientation on the lower bearing carriers (brackets) (4-3) of the oscillating poles (4/4a) on the proper side. To do this, simply lift the front of the foot rod and position the front bearing retaining plates (4K) so that you can fit the bearing carriers (brackets) (4-3) of the oscillating poles inside them. Then screw in the corresponding hexagonal head screw (C) with the appropriate spring washers (D) on each side of the bearing brackets (4-3). First, screw in all the four screws (C) without tightening them (leave them loose). (The final tightening of these screws will be done after all the parts are mounted and a movement test is carried out! At this moment you will need a second 13mm wrench, otherwise the screw on the opposite side will turn and you won't be able to stop it)

4.4 Screw the hinge pins (5b/5c) that are loosely inserted in the bearing carriers (4L) of the foot rods (4f/4e) into one of the threaded holes (a, b, c) of the crank levers (5/5a) without tightening them (**2. / Warning: watch for the left and right thread**). For the standard position, use the 17mm wrench to screw the hinge pins (5b/5c) to the outer threaded hole (c). See page 12 for the other optional positions of the crank swivel pin. Then screw the corresponding M8 hexagonal head screws (C) with the appropriate big washers (E) in the front side of the hinge pins (5b/5c), still without tightening them.

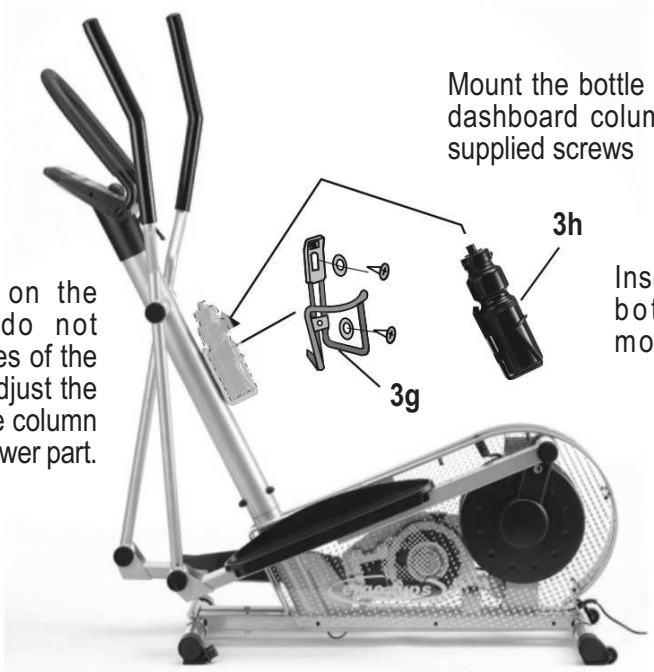
4.5 At this point in the assembly process it is possible to test the movement of the ellipse trainer and to evaluate the adjustment (fitting) of the parts to one-another. If no visible defect and no unexpected (strange) friction or squeak noise is detected then you should firmly tighten all swivel joints and attachment screws, including those of the hinge pins (5b/5c with the 13mm or 17mm wrench), and double check their seating position.

4.6 Once you are sure that all the screws are firmly tightened, you can put on the corresponding swivel joint covers (4d) and the caps (J) of the dashboard column mounting screws.



Mounting the bottle holder

Mount the bottle holder to the dashboard column using the supplied screws

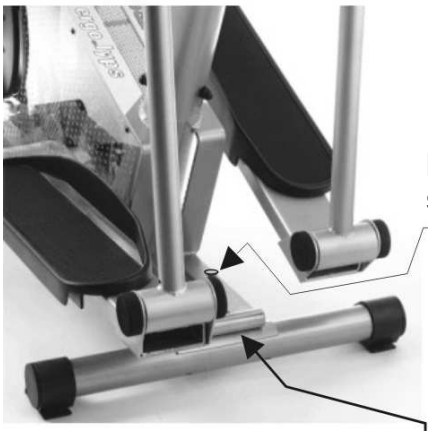


Insert the drinking bottle into the mounted holder.

Note:
If the treaded holes on the dashboard column do not correspond with the holes of the bottle holder, you can adjust the holder to the holes of the column by sliding its adjustable lower part.

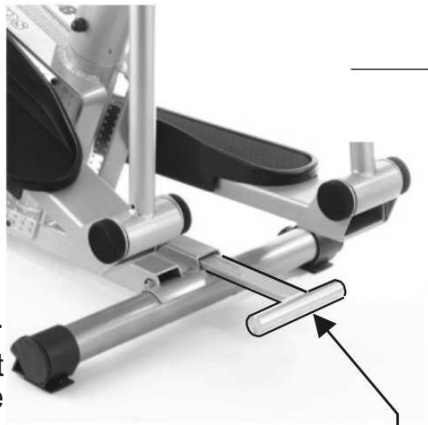
Bringing the lift and carrying handle into position

The Ergometer can be moved on its caster roller

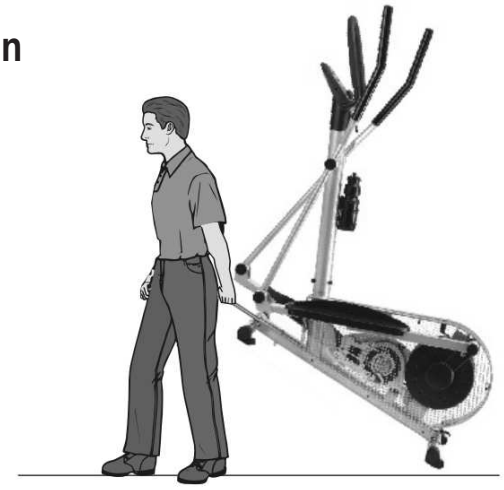


Handle locking screw

Handle inserted into frame

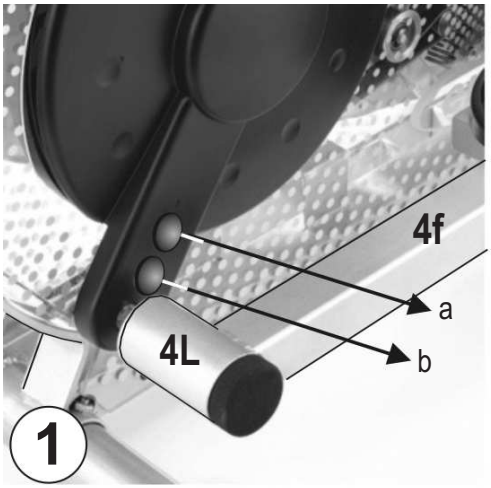


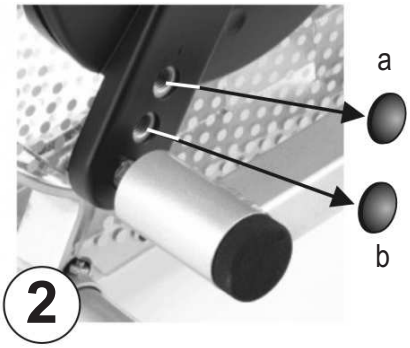
Handle (1c) pulled out of the frame

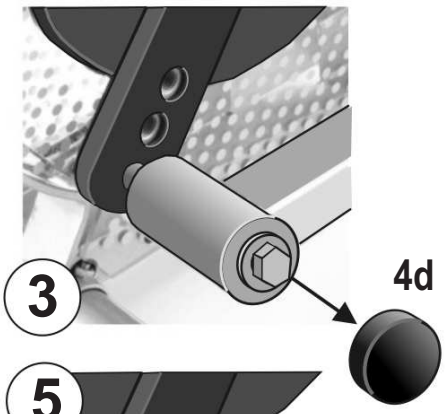


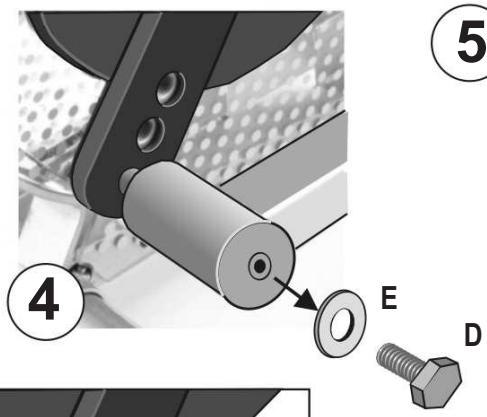
1. Loosen the locking screw
2. Pull the handle out until it stops.
3. Lift the ergometer by the handle at the front until the roller casters on the rear foot touch the ground.
4. Lift the ergometer until the person lifting it is standing straight and his back is not overloaded.
5. It is then relatively easy to move the ergometer on the integrated roller casters on a flat floor.

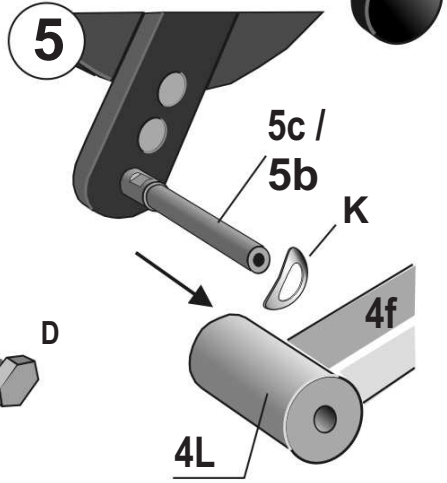
Crank hinge position / Alternative positions of the crank hinge(5b)

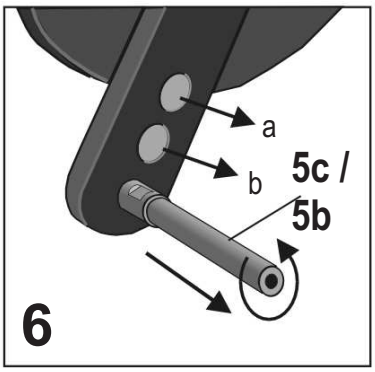








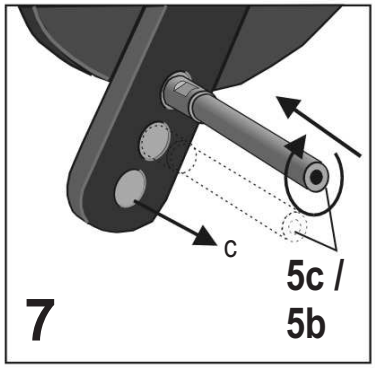




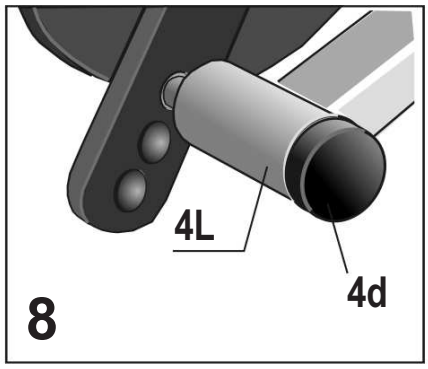
Unscrew the hinge pin (5c / 5b) using the 17mm wrench

Required tool:

1 13/17 mm wrench



Move the hinge pin (5c/5b) to position a or b and tighten it using the 17mm wrench. Then mount the crank hinge bearing / foot rod (4L) in the reverse sequence.



Crank hinge bearing (4L) in the new position at threaded hole a

The crank hinge bearing (4L / right - left) can be set at two alternative positions (a and b) in order to adjust the foot rods to a flatter angle. The consequence of this setting is that the foot rods (4f/4e) and particularly the step plates (4g) move over a flatter ellipse. This alternative movement is particularly intended for older and handicapped persons whose motion capabilities at the knee level is limited.

Pictures 1 to 8 illustrate the steps sequence to unmount and modify the setting.

The covers of the threaded holes are screwed in place and can be unscrewed using a coin.

Liability

The manufacturer will not be held liable if the ergometer is not used in compliance with the provided instructions and recommendations and if the prescription are ignored.

Replacement of the Dashboard Battery

CAUTION! Failure to correctly replace the battery may create an explosion risk.

A button cell battery (CR 2032) is located on the underside of the dashboard circuit board. This battery must be replaced when the time and date keeping function fails. Problems when turning on the machine and display failures are also signs of an empty battery.

Warning: The device must be switched OFF when replacing the battery. Afterward you must set the date and time.

Unscrew and remove the 4 screws on the lower part of the dashboard. Then tilt the upper part of the dashboard up carefully.

Take care not to separate any cable connection.

Never touch the electronic parts of the dashboard with your fingers! Charges of static electricity can destroy the sensitive parts.

Press the clip holder outward with a pin to replace the battery, remove the battery and insert a new one with the plus symbol up.

Reassemble the upper part of the dashboard carefully.

Caution!
Do not pinch any cable!

Notes about used button cell batteries
- Keep batteries away from children, and do not swallow them!
- Do not recharge empty batteries and do not throw them in fire.

Please recycle used batteries by bringing them to the appropriate collect point, or return them to your dealer.

Replacing the V-belt

Procees as follows to replace the V-belt:

Unplug the power cable from the power socket before opening the device!

The manufacturer, daum electronic gmbh, will not be held liable for any damages arising as a result of negligence while changing the V-belt!

Take particular care to avoid damaging the internal parts of your ergo_lyps while you are working.

The drive unit (pulley and driving shaft) is located on the right side of the device (looking forward). You must therefore remove the side cover on the right side.

1. First the right foot rod (4f/4e) and the crank hinge pin (4L) must be removed. This is done by following the mounting instructions in the reverse sequence. (see also page 35 / Alternative crank hinge pin positions)

2. Then remove the 9 screws (1p) attaching the side cover. Lift the side cover plate (1m/1n) at the front and turn the crank lever (5/5a) to the rear, then you can carefully remove the side cover over the crank wheel (1r) to the rear.

3. The driving parts on the carrier plate /drive unit (9) are now freely accessible. Press on the belt tensioning roller (9p) against the tension lever (9g) and the tension spring (9h) to loosen the V-belt tension (9c), and then pull the belt from the pulley (9a) and drive shaft (9r).

Follow the same steps (1 to 3) as described above in reverse sequence to install the new V-belt.

Before installing the new driving V-belt, you should clean the belt slipping surfaces of the pulley and the drive shaft, as well as the belt itself, with alcohol or cleaning petrol to remove the grease.

Fig. 1

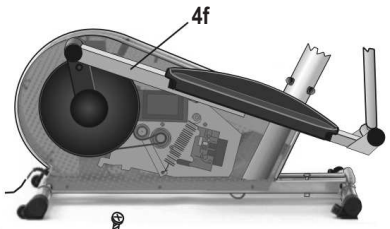


Fig. 2

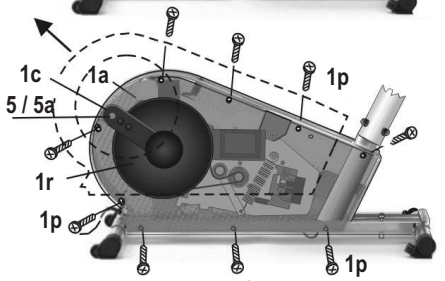


Fig. 3

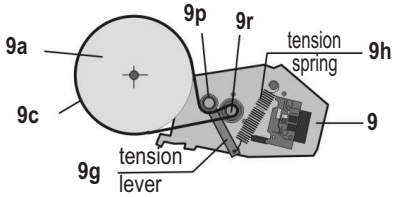
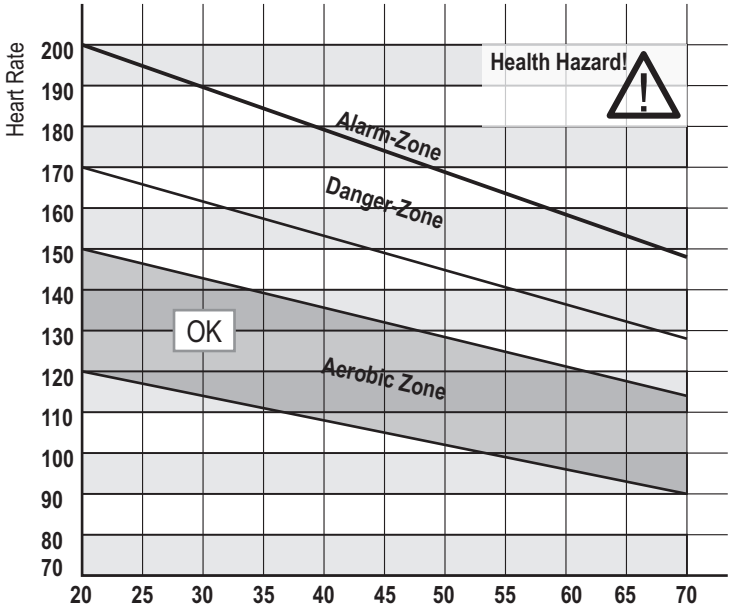


Table of Traget Heart Rate / Aerobic Zone

Example:
Heart rate - target zone as a percentage of maximum pulse rate with age limit set up.

		Aerobic Zone		Danger Zone
Age	**up to 59%**	**60%-75%**	**76%-85%**	**86%-100%**
20	**40 - 119**	**120 - 150**	**151 - 170**	**171 - 200**
25	**40 - 116**	**117 - 146**	**147 - 165**	**166 - 195**
30	**40 - 113**	**114 - 142**	**143 - 161**	**162 - 190**
35	**40 - 110**	**111 - 138**	**139 - 157**	**158 - 185**
40	**40 - 107**	**108 - 135**	**136 - 153**	**154 - 180**
45	**40 - 104**	**105 - 131**	**132 - 148**	**149 - 175**
50	**40 - 101**	**102 - 127**	**128 - 144**	**145 - 170**
55	**40 - 98**	**99 - 123**	**124 - 140**	**141 - 165**
60	**40 - 95**	**96 - 120**	**121 - 136**	**137 - 160**
65	**40 - 92**	**93 - 116**	**117 - 131**	**132 - 155**
70	**40 - 90**	**91 - 113**	**114 - 127**	**128 - 150**
75	**40 - 86**	**87 - 109**	**110 - 123**	**124 - 145**

Overview Diagram of the Target Heart Rate



Example for a person 50 years old

- **Alarm-Zone**
  Heart rate above 171
- **Danger Zone**
  Heart rate 145 - 170
- Heart rate 128 - 144
- **Aerobic Zone**
  Heart rate 102 - 127
- Heart rate 40 - 101

If the braking power is reduced automatically, by e.g. 50 Watt, in the danger zone, and the value set for the next program step is, e.g. 150 Watt, then the training will in fact be carried forward with a load of 100 Watt, as will be shown in the Watt display. The computer makes this adjustment autonomously as a safety measure.

Aerobic Zone

You should train in the aerobic zone if you want to increase your load capacity. In this zone more glucide get burned that fat.
The benefits of the strengthening have an important impact on the heart and respiratory systems.

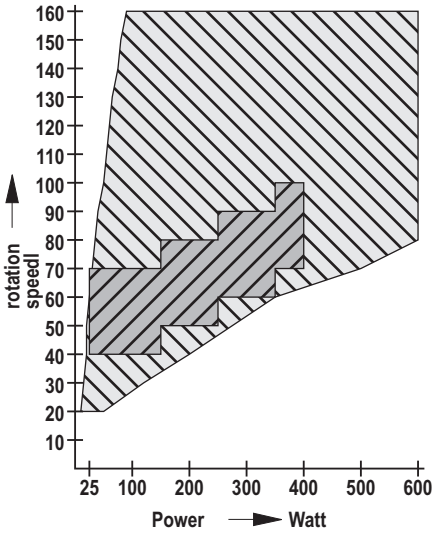
Danger Zone

High performance training - hard training with typical phenomena like pain, exhaustion-fatigue. Lactic acid is transferred in the metabolism, without producing excess lactate.

Alarm Zone

Extensive high performance training - to practice only with experience and precaution, because it can easily lead to injuries and overloading. This zone is reserved for high performance athletes only.

Rotation Speed Power Diagram



Maximum Power Zone

ergo_lyps premium8

Normal Zone

Conform to DIN EN 957 1/-9

Accessories

ergo_memo-card2

You must wait for a beep signal when a memory card is inserted in a premium device.
This can take about 5 seconds.
(if the card is empty it will be initialised)

In principle the memory card should be pulled out while you are not pedalling or only after the beep signal!

ergo_memo-card2

The protection slider must point to the bottom when the card is inserted into the dashboard. This will make it possible to write to the card. (If the slider points upward the card is locked)

Earclip

Connect the ear clip to the Cardio socket. The pulse rate is measured by means of an infrared sensor and shown on the screen.

Earclip

Relax Sensor

The relax-sensor controls the relaxation process by means of the relax function following a physical fitness training or any other loading.

Relax Sensor strap

Cardio Sensor Chest Strap (Special Accessory)

The chest strap contains a wireless transmitter that transmits the pulse rate to the Cardio pulse rate receiver in the device.

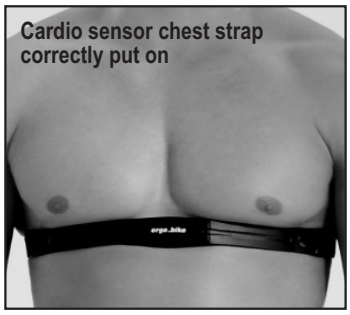
What is in the box of a Cardio Sensor chest strap (non coded):

1 Skin-friendly Cardio Sensor chest strap with integrated pulse sensor and transmitter
1 Adjustable elastic strap to attach it to your chest

The chest band is available from daum electronic gmbh; order no. 90 91 015.

Cardio Sensor chest strap

Cardio sensor chest strap correctly put on



Note: Your pulse rate will be correctly evaluated over the whole measuring range only if you use a non-coded wireless pulse rate transmitter.

The button type battery should be replaced when you note a loss of battery power. Simply remove the battery cover on the underside of the transmitter with a coin and replace the battery with an equivalent new one.

Underside of the Cardio sensor chest strap

Warranty Conditions

Please consult your dealer/retailer in the case of a failure or trouble. The manufacturer, daum electronic gmbh, provides the warranty to your retailer according to the following conditions:

1. We guarantee that our products are free of manufacturing and/or material defects.

2. We will correct any problem pertaining to the above categories, while all customer's claims not related to those categories are excluded from any repair services provided by us.
   We reserve the right, upon returning of the product in question, to exchange it with another product of the same type and value or, at our own discretion, to take it back against repayment of the amount paid by the customer (deducting overhead costs).

3. Our warranty covers a period of two years for parts and labour in the case of private utilisation of the product, and a period of three months, for parts and labour, in the case of commercial utilisation of the product, in both cases starting on the manufacturing date.

   We will fulfil this warranty service provided the customer will pay all freight and transport costs, including those for spare parts, and the cost of any packaging material we should possibly need to use.

   Returned devices will only be accepted if in the original packaging.

   Advance replacement of parts under warranty will be invoiced and delivered against payment (COD). The amount paid will be immediately refunded upon reception of the returned old part by us.

4. All other warranty claims, specially claims for the compensation of direct or indirect damages, or damage to a third party, or damages to other objects, as well as of damages due to failure, and of labour costs, are expressly excluded to the extend authorised by law.
   Should the repair fail within a reasonable delay, the customer has the right to demand a price reduction or the cancellation (modification) of the contract at his discretion.

5. We decline any responsibility for any wear occurring through normal utilisation. The warranty will be considered null and void if our instructions for mounting and utilising the device are not respected, or if the chemical products we recommend and deliver are not used, or if any modification was made to the device without our prior approval.

6. It is the customer's responsibility to check each one of our deliveries immediately upon reception. Any complaints about missing or defective parts must each be immediately submitted in writing.

7. We do not guarantee that the delivered product will be suitable for the usage intended by our customer. Extended agreements need to be expressly confirmed in writing.

8. Any technical advice provided by us is formulated according to the best of our knowledge and in good faith, based on our own experience and testing. We do not assume any responsibility for these services, unless serious negligence can be proven on our part.

   If you wish to obtain more information on your device, you can visit our service and repair hints web site on Internet at (www.daum-electronic.de). You can also call us on our hotline at daum electronic gmbh (++49(0)911/97536-0).

1. Information

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To do this please point your browser to the web page http://www.daum-electronic.de/de/support/opensource.html and select the software you whish to download.

1.1. GNU General Public License

Version 2, June 1991

1.2. Preamble

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