

# ergo\_lyps\_

User Manual



Premium

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# Preface

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 more than a home trainer. It is suited for sportive and therapeutic utilisation at home.

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. The advantage being that the user cannot unknowingly be subjected to a wrong load (see diagram on page 38).

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 a continuous load setting from 20 to 600 Watt.

### 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 premium88. A special data cable is needed to this effect, which you can order from daum electronics gmbh.

# **Safety Notes**



### **Notes About Personal Safety**



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

PPersons 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 physical load capacity. This can have serious consequences on your health

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 premium88. It is an integral component of the device.

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.

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 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.

Cellular telephones may not be used in the direct vicinity of the device, otherwise they may interfere with its functionality.

When interconnecting many devices 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) Only cables certified by daum electronic gmbh may be used to connect the device with other devices.

A 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).

Electromagnetic interferences are primarily characterised by the oscillation of the displayed load value. If the displayed value varies uncontrollably, even when the speed is higher than 30 RPM, this can be an effect of electromagnetic compatibility (EMC).

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° to +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 to +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.

### **Compliance to Standards**

The ergometer may not be used if the certifications/approval and the defined safety standards 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.

### Mains Voltage 230 Volt

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.

Mains 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

### **Used Symbols**

The symbols used on the ergo\_lyps premium88 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

 Refuse bin for electrical and electronic devices

 Read the user manual

### Accessories

The documentation supplied is an integral part of the ergo\_lyps premium88 and may only be copied or distributed with the authorisation of daum electronic gmbh. 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 applicable standard.

The ergo-bike premium88 may only be used with the internal and external software supplied and authorised by daum electronic gmbh.

# **Safety Notes**

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 in not allowed.

### 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

# **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!

The ergo\_lyps makes it possible to define and control the exercise sequence yourself. It is thus possible to continually adapt 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).

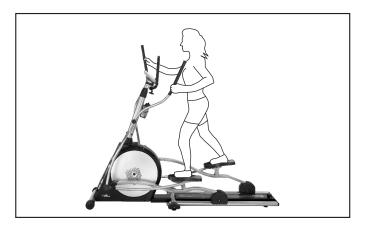
Ergometers are designed for endurance, agility, and physical condition training, as well as for strengthening the cardiovascular system and increasing the muscle mass. The inclusion of the pulse rate in the parameters used to control the load enables training in the efficient aerobic zone.

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 bike 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 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



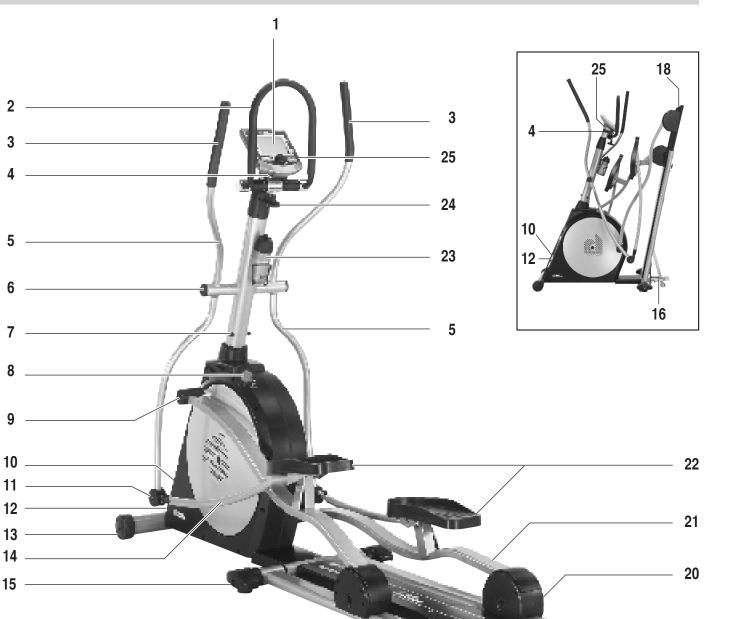
### **Training Hints**

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. 4

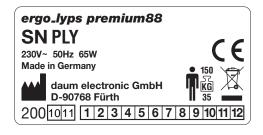
6

7



- 1 Dashboard
- safety handle / U shaped handle 2
- safety handle / Oscillating pole 3
- toggle screw for the dashboard hinge 4
- **Oscillating pole** 5
- Cover 6
- 7 Cover cap
- 8 Lock button
- shaft cover 9
- power switch 10
- hinge cover 11
- 12 name plate
- 13 Stand foot with roller casters

- 14 control rod
- 15 Stand foot with height adjustment
- 16 releasing lever
- 17 Height adjustment
- 18 Guide rails
- 19 Lock button with safety lock
- 20 Roller caster with protection
- 21 Foot rods
- 22 Step plates
- 23 Drinking bottle
- 24 clamp screw for the handle
- 25 interfaces for connection



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# Setting Up

### Transport and packaging



The manufacturer and dealer will not be held liable for any transport damage and for missing parts.

Please take the time to carefully inspect the package and its content upon delivery of the device. Any claim referring to transport damages will only be accepted by the transport insurance if they are immediately recorded in writing on the delivery documents of the freight forwarder.

Please contact daum electronic gmbh for any open claims.

Daum training devices are generally shipped with a freight forwarding company. Daum electronic gmbh is member of the "Green Dot" organisation for recycling purposes: Der grüne Punkt - Duales System Deutschland GmbH.

Please unpack the device as described in the user manual. Verify that the device and accessories are not damaged, that the small parts are not missing and that the connection cables are not damaged.

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.



Heavy devices may only transported by authorised personnel and in compliance with the applicable safety directives. Otherwise the situation may be dangerous for the person or the machine.

### **Assembly Notes**

The ergometer should be installed on a level and solid ground (e.g. a concrete floor). For other floor types we recommend installing and using the device on a protective base. Appropriate floor protection bases can be ordered from daum electronic gmbh. Order No. 0810402.

The manufacturer will not be held liable for any damage done to the floor.

DThe training device should be installed on a level ground and clean. The device must have a horizontal stand and be stable. The feet must be adjusted to provide these conditions and must all have contact with the floor.

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 load carrying capacity of the floor must amount to at least 600 kg / sq.m. if in doubt consult a structure analyst/engineer.

The device may only be connected to a power outlet (see connections) and used when all the conditions above are satisfied.

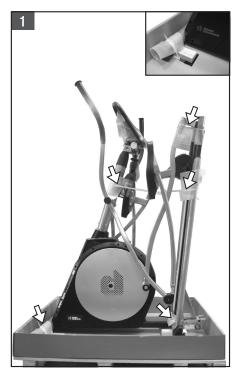
The ergo\_lyps functions with a mains voltage of 230 Volt, 50 Hz and has a power consumption of 65 Watt. The power supply you wish to use must satisfy these requirements!



Please make sure the power cord is unplugged before proceeding with the assembly/installation!

### Assembling the device

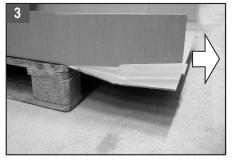
Release the cable retainer.



Remove 4 wooden pads.



Open the package. Remove / pull the device carefully.



# Setting Up

# D

### Lock button

The lock button is a safety latch.

It is used to lock and unlock the foot plates and their mechanism. It allows to safely fold the device and prevent it unauthorised use!

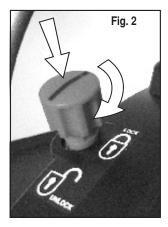
- Unlocking the lock button (Fig. 1):
- Pull the lock button and turn it 90° clockwise until it latches (remains in the pulled position)

The foot plates are now free to move.

Locking the lock button (Fig. 2): Turn the lock button 90° clockwise. It will then engage (latch) when the oscillating rods are moved and the eccentric plate engages.

The foot plates are now blocked.

# Fig. 1



Safety lock against unauthorised use! Safety lock for safe folding of the device!

Folding the device

- Lock button is engaged

is now ready to be folded).

pull out the guiding rail (Fig. 4):

Tighten the toggle button back.

-

(Fig. 3)

until the red safety pin engages (latches).

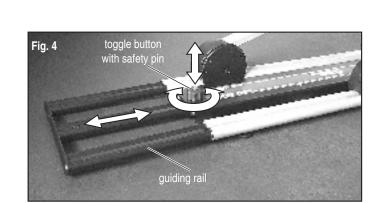
Fold the ergo\_lyps slowly until the release lever engages.

### Unfolding

Two air (pneumatic) springs are used to support the folding operation. This makes folding and unfolding significantly easier.

- Press the release lever with the foot (Fig. 3) (the engaged folding mechanism is then released)
- Unfold the ergo\_lyps slowly
- Insert the guide rail (fig. 4): Loosen the spring mounted toggle button by turning it 1 to 2 turns und pull it up. Push the released guiding rail inside while releasing the button until the red safety pin engages (latches).
- Tighten the toggle button back.
- Release lock button

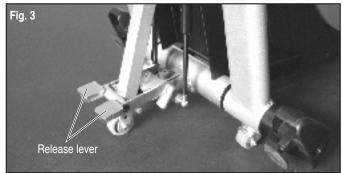
Pull the lock button and turn it  $90^{\circ}$  clockwise until it latches (remains in the pulled position)



Turn the lock button 90° clockwise. It will then engage (latch) when the oscillating rods are moved and the eccentric plate engages (the ergo\_lyps

Loosen the spring mounted toggle button by turning it 1 to 2 turns und then

pull it up. Pull the released guiding rail out while releasing the toggle button

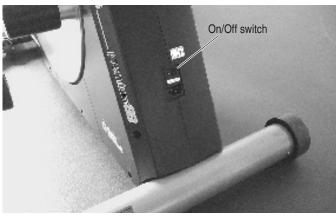


# Setting Up

### Switching On / Off

Please read the safety notes before switching the ergo\_lyps premium88 on. Insert the ergo\_memo-card2 in the dashboard before switching the device on.

Use the On/Off switch  $\ _{\!\!\! ,O}$  / I" on the lower front section of the device to switch it on and off.



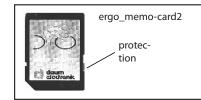
When switched on, the system takes about 1 minute to load the software. The colour screen displays during this time a software load progress bar.

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. The maximum allowable card size is 1GByte.

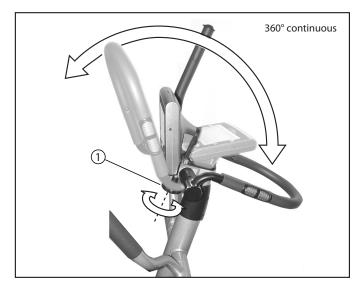
Points to consider while manipulating memory cards?

- 1. The electronic components can be damaged by electrostatic discharges. Therefore you should eliminate (discharge) any potential electrostatic charge of your body before manipulating a memory card. You can do this by touching a grounded metal object (e.g. heating system, water piping).
- 2. Avoid touching the exposed contact pins of the memory card.
- 3. The memory card should not be exposed to heat, direct sun shine and humidity.
- 4. Do not bend, twist or drop the memory card.
- 5. In order to avoid data loss and / or damage to the memory card you should NEVER remove the card from the used device during the transfer of data. Do NEVER pull the card from the device while data are being written, e.g. during a training session or while a user is pedalling.
- 6. Make backups on a PC of the data stored on the card at regular intervals

### 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 cables



### Notes about Heart Pulse Rate Measurement

### 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.

### 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 closes possible to the head). The contact surfaces must sit entirely on the skin.
- 4. After the training clean the ear clip with a soft cloth and 5% soapsuds.

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.

### Wireless heart rate measure - Cardio Sensor Belt

The Cardio sensor chest belt 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.

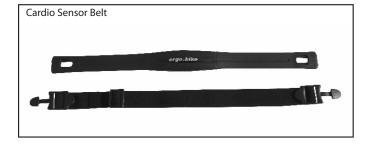
To ensure the maximum efficiency of the Cardio sensor belt, you should lightly humidify the contact surfaces (inner side) of the chest strap before starting the training.



Note: Using two chest belts simultaneously in the same room close to one another, at about 1.5 meter from the receiver, can lead to the display of a wrong pulse rate.

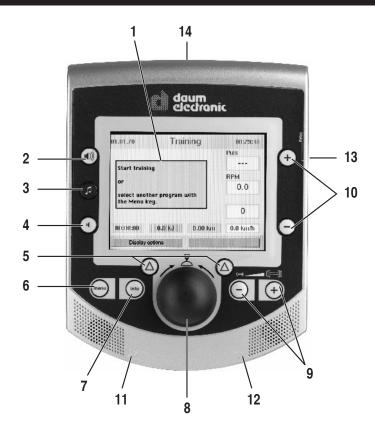
See tables and diagram for heart pulse rate evaluation page 33.

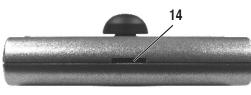




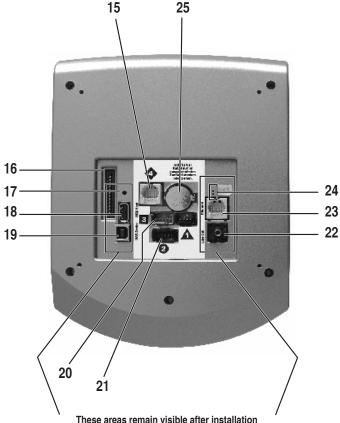


# The Dashboard





### Console front side



### Top panel

- 1. Colour screen
- Volume (up) 2.
- 3. **MP3-Player**
- Volume (down) 4.
- **Function keys** 5.
- Menu 6.
  - 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

### Underside

- 15. RS422 interface to the control board
- 16. unused
- Reset key 17.
- **USB Host** 18.
- 19. **USB Device**
- 20. Wireless heart pulse rate
- Operating power from control board 21.
- Audio connector L/R to external amplifier (Line Out) 22.
- Network connector (Ethernet) 24.
- 24. Light-emitting diode (LED) for network connector
- 25. 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 heart pulse rate measure, the heart 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 various functions of the device.

If the request 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).

### Switching On (with ergo\_memo-card2)

Insert the ergo\_memo-card2 in the card reader before turning the device on.

(D)



Note:

We reserve the right to modify the figures



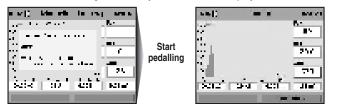
### Demo Mode (on the ergo\_memo-card2)

A multimedia presentation with images and sound will introduce you to the commands and functions of the device. The data needed for this demonstration are stored in the folder "data/demo mode" on the ergo\_memo-card2. If the demo mode data are not on the ergo\_memo-card2, the program with installation instruction can be downloaded from our web site at www.daumelectronic.de > support > premium line > ... accessories.



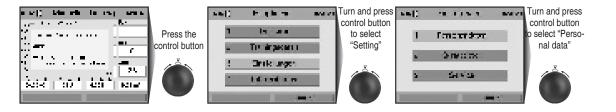
### Starting Training Without Selecting a Program

You can start training immediately with this screen displayed.



### **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.





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**

### Heart Pulse Rate Training Programs (Heart Rate Steady State Programs)

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



### Training programs Cardio Plus

The device adjusts the breaking power in watt of the first program step and waits until the required heart pulse rate is exceeded. The second program step is then activated and its watt breaking power is set.



### **Elevation Profile Training Programs (distance programs)**

The distance programs are varied, efficient, and simulate a realistic jogging tour. Only here you have the possibility to use the gearshift (e.g. by turning the control button during the training)



### **Speed Training Programs**

With the speed controlled programs the speed is maintained at a constant level by appropriately controlling the braking load.



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



### 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.

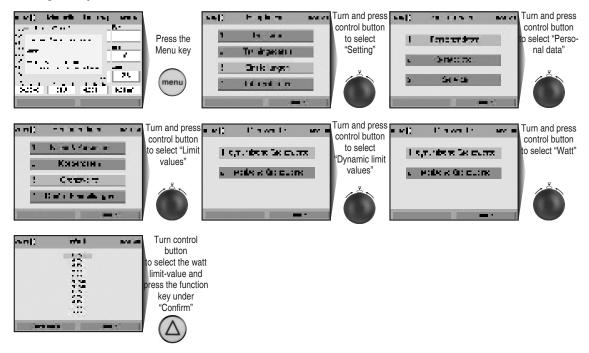
### **Setting Limit Values**

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 over and under run.
- Static limit values are reached only once per training.

### Setting the Dynamic Limit Value for "Watt".

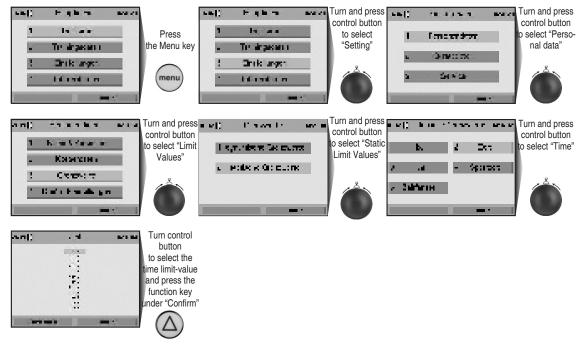


### "Watt" limit value reached while training

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.

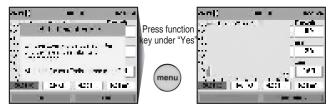
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### Setting the Static Limit Value for "Time"



### "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.



### **Reviewing Stored Training Data**

Recalling stored training data.

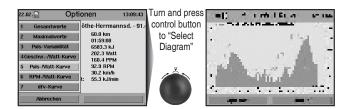


### e.g. Individual Training

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



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



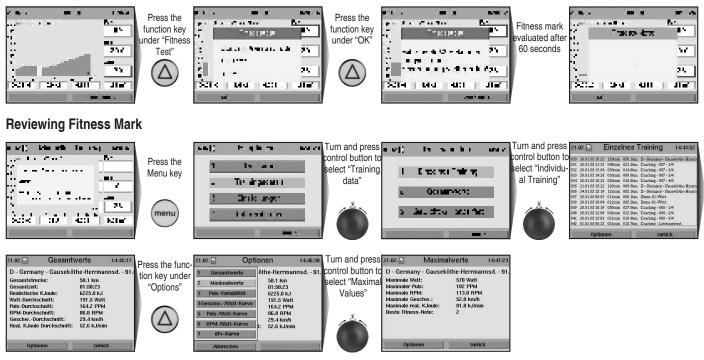
### **Fitness Test and Fitness Mark**

The fitness test can be executed anytime during training. A heart pulse rate measuring device (pulse sensor, ear clip, or chest belt) 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 heart 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 heart 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

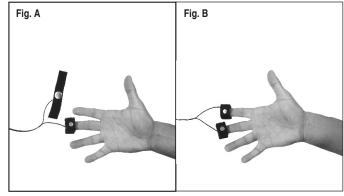


### **Relax Function**

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 the values of which 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 ergometer and sit in a relaxed position, or even lay down, close to the ergo\_lyps and calm down.



 $\bigcirc$ 

### Connecting the relax sensor:

- 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**

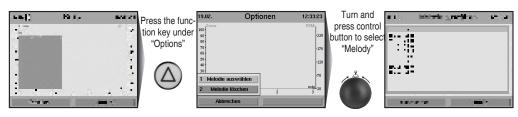


A warning message will appear on the screen if you forget to put the relax sensor on.



You can download a free relax melody from our web page at www.daum-electronic.de under Support > premium line > ... accessories. The daum relax melody (mp3 file) should be saved in the "/mp3" folder on the ergo\_memo-card2. (see chapter MP3 player page 25)

### e.g. choosing the music title



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.daumelectronic.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/premium program" on the ergo\_memo-card2.

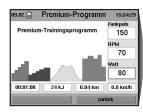
Every premium program consists of a file with the extension dpp and the corresponding folder.

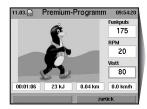
### Starting the premium programs

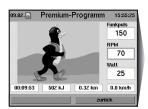


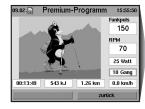


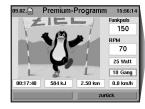
	m 15:50:0
Watt. Premium-Wattprogramm 5 min	Puls
Beginnen Sie mit dem Training	
	RPM
o- oder	0
wählen Sie ein anderes Programm über die Menü-Taste.	Watt
0	65
0 1 2 3 4 5	
00:00:00 0 kJ 0.00 km	0.0 km/h











Select a premium program by turning and pressing the control button. Each program has its individual 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 under worked."

"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**



### Introduction

The "Coaching" concept introduces an intelligent training program offering the user four different training targets to choose from. The integrated 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 an individual fitness test and a personal performance evaluation as well as the available time. 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 from the beginning:

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.

We recommend to pedal at a speed of about 65 to 80 RPM during the performance test. Users with a very high physical performance capacity can also pedal at a speed of 80 to 100 RPM.

### Very important!

### Please do not let your ambition pull you! you must absolutely avoid a physical overload! Stop 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
  - muscular development

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 belt (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\_lyps 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 ball games or recreational sport activities, less toward endurance sport. The training frequency is about 1 to 2 hours per week.

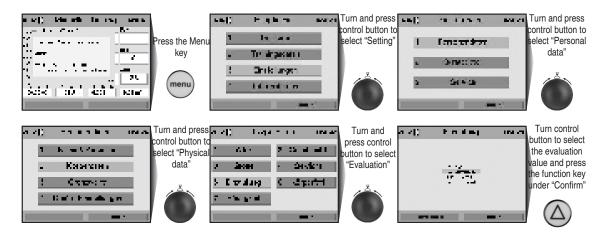
### Advanced:

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.

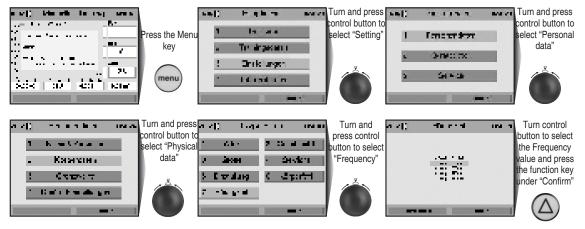
### Entry of your Personal Performance Evaluation:



### **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:



D

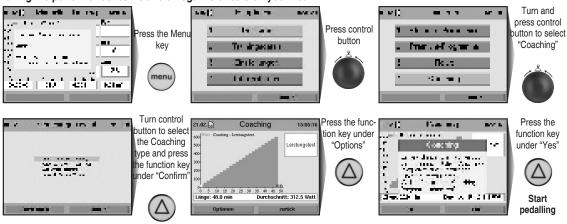
### Starting Coaching for the First Time

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:

- Cardiovascular
- Weight and fat reduction
- Fitness training
- Muscular development.

# We urgently advise you to undergo a medical physical aptitude test before taking the performance test to avoid negative effects on your health.



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



### **Coaching Performance Test Interrupted**

DThe first performance test is interrupted when the user presses 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 heart 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

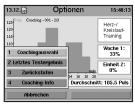
A period of at least 12 hours must separate the first coaching unit following a performance test and the performance test itself, because the user works out to his performance limits in the test. If the user tries to start before the end of this period a warning message is displayed.



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.

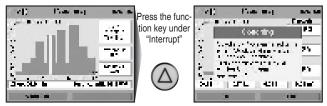


After the first Coaching unit is completed the Coaching menu will present all the options: "Coaching type", "Last Test Results", "Downgrading" and "Coaching Info".



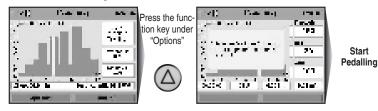
### Interrupting a Coaching Unit

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.



### **Resuming an Interrupted Coaching Unit**

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



### 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.

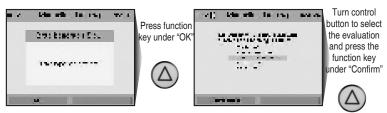
(D)

### 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:

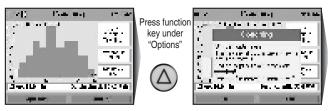
- too difficult
- a little too demanding
- just right
- a little too easy
- too easy

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.

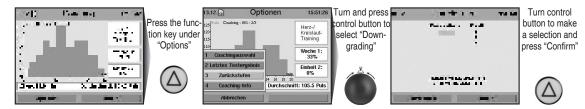
### Downgrading in the Coaching Units

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.



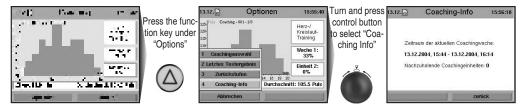


Use the Coaching Menu to downgrade yourself as follows:



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.

It is always possible to change the training objective.

### 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.

### **Online-Training**

All that is needed is a one time registration and you can start using Online Training.

The daum training community, accessible at www.worldwidewebtraining.de, makes Online Training and additional events possible.

You are welcome to join at daum Online Ergometer Training.

You will find here all the important information to join Online Training. The required software for the PC and device with the required user's manual is available for download free of charge under menu option > Information....

Curious ?!?

You can even watch the competition without registering, go to "watch and observe" to get a first impression. Have fun while training.

You will find more information about Online Training and our devices at www. daum-electronic.de

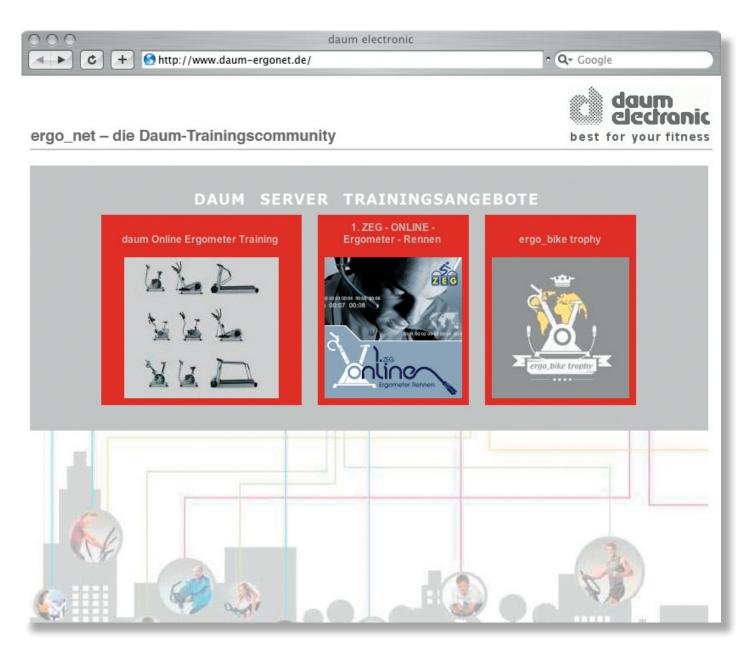
The complete version of our PC software: ergo\_win Premium Pro can be obtained from daum electronic.

### www.worldwidewebtraining.de The daum internet training offer!

The daum Internet Training Server offers interested users and training specialists professional training and communication possibilities.

Group runs with up to 150 participants, image and sound communication with up to ten participants to raise motivation and team spirit.

- Web and Email based registration
- Login on the Web
- Entry and modification of personal data
- Reservation for group runs
- Detailed view of group runs
- Participation to group runs
- Ranking lists
- Saving of training data and parameters
- Training data evaluation
- Guest access with Live Ticker
- Image and sound transmission
- Up to 150 participants per group training
- Integrates platforms of other training providers





### Group training / network races

### Introduction

Group training is the situation we have when many users want to train together. Group training with Daum training devices means that up to 10 participants (in the local network, e.g. studio, or over Internet) can run against each other. Within the group of participants one participant must take the role of server. This user establishes the program to use and starts the training when all participants are available. The other participants, described here as clients, wait on their devices for the start of the training, until the server gives the virtual starting shot.

### Requirements

In order to participate to a group training various requirements must be satisfied. The exact requirements in consideration depend on whether the group training is held over a local network or over Internet.

### Requirements for local network

- To participate as client (participant that does not start the training) or as server (participant that starts the training) the following conditions must be satisfied:
- training device software version starting from 1.450
- Network cable to the Hub/Switch/Router or crossover cable for the connection of two devices/PCs.

### **Requirements for Internet**

To participate as client (participant that does not start the training) or as server (participant that starts the training) the following conditions must be satisfied:

- training device software version starting from 1.450
- functional Internet connection
- Network cable to the Router.

### Participating as Client:

Proceed as follows to participate as client:

1. Make sure that your Premium/Medical device is properly connected with your router or switch.

2. Make sure that your Premium/Medical device is correctly configured to log on the network. Check therefore the active network settings under Menu -> Information -> Network. Correct the network settings as needed under Menu -> Settings -> Device data -> Network.

Note: if you have a e.g. DSL or ISDN router, the ideal choice in the network menu is almost always the DCHP option.

3. Open the participate menu under Menu -> Training -> Group training -> participate.



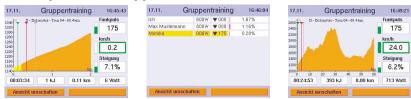
If no connection is yet registered open the options menu and enter a new web address or IP address.



The participant playing the role of the server can give the needed data (web address or IP address). After you have entered the required data, press the control button or select options -> create connection. The device will try to establish a connection with the server within 5s. The following messages are displayed depending on whether the connection was successful or not:



Once the server starts the race, the system will switch to the training view. You can then use the view key to switch between a zoomed in view of the training graph, the ranking list and the training general view.



Note: if you terminate the training by means of the menu key, you will leave the current group training. You can not then reconnect to that current group training.

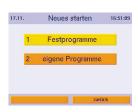
### Participating as Server:

Proceed as follows to participate to a group training as server:

- 1. Make sure that your Premium/Medical device is properly connected with your router or switch with the network cable.
- Make sure that your Premium/Medical device is correctly configured to log on the network. Check therefore the active network settings under Menu ->
   Information -> Network. Correct the network settings as needed under Menu -> Settings -> Device data -> Network.

Note: a static IP address facilitates with many DSL or ISDN routers the configuration of your device as server.

- 3. Make sure that an eventual firewall (router) is configured in such a way as to let port 1366 through to the IP address of your device.
- 4. Open the participate menu under Menu -> Training -> Group training -> Start new.



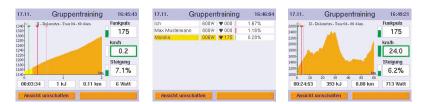
5. Select the required training program from the built in programs or the personal programs.



6. Confirm your choice by pressing the confirm key and wait until all participants have logged in.

17.11.	Warten au	f Teilnehmer	16:52:23
Monika			
lch			
Max Mus	termann		
_		_	
	Starten	zurück	

7. The list of participants is updated after every login. Once all participants are connected press the Start key to start the group training. Once the race has started the system will switch to the training view. You can then use the view key to switch between a zoomed in view of the training graph, the ranking list and the training general view.



Note: if you terminate the training by means of the menu key, the training will end for all the participants.

### Mixed group training

### Configuration

Mixed group training means that various different devices of daum electronic participate to the race in the group. The respective devices/ergo\_win 2003 must be configured according to the description in the corresponding chapters.

### Equalising the chances

The only thing to take into consideration is the fact that the various devices have different load limits in watt. Some devices have a loading limit of 400W maximum, others of 600W, 800W or even reach 1000W.

With distance programs, the load in watt is computed based on the speed and inclination. And this computation can, for instance, indicate that for a given speed and inclination a load of 750W must be set. On the devices with a load limit of 400W maximum, only 400 W can be set, and on those with a limit of 600W, 600W will be set, i.e. those participants will benefit from a lower loading compared with participants on devices with 800W or 1000W limits!

A possible solution to give all participants equal chances consists in setting the same load limit in watt for all participants, which can only be as high as the limit of the "weakest" device!

### Combining devices of various classes

It is possible for devices of various classes, e.g. ergometers, ellipse trainers or treadmills, to participate in the same group training. But considering the various maximum speeds for the respective device classes, this is not a reasonable configuration.

### You will find further information about the configurations starting at page 37.

### 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. The latest update version is always available as a data file to download from our Internet site at www.daum-electronic.de, or you can obtain it in the form of an Update-Card directly from daum electronic gmbh.

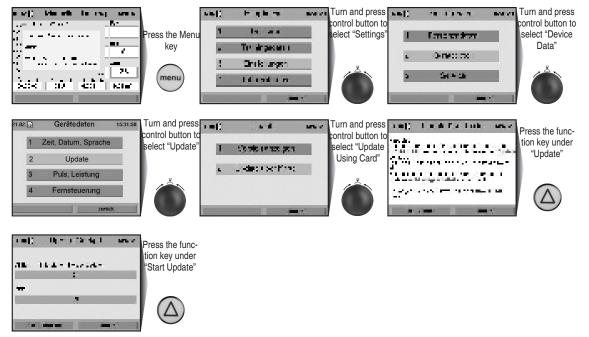
Order the Update-Card directly from daum electronic gmbh; once the update operation is complete, you can use this card as an additional ergo\_memo-card2 for another user.

If you prefer to use the possibility to update from Internet you will need a computer and a SD card reader

(available from electronic stores or daum electronic gmbh).

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 ergometer contains a glossary of keywords used in connection with the utilisation of the dashboard and that may need further explanation.

A short description is provided for each one of these keywords.

### Viewing the Keywords Glossary



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### **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!

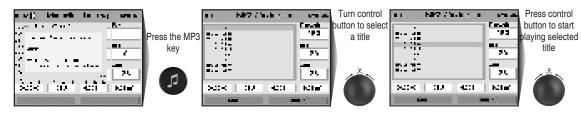
Insert the memory card in the dashboard at the front side of the device..

### 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 in the list 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 listen 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 each of the predefined 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.

D



# **EC Declaration of Conformity**

We declare under our sole responsibility that the

product: ellipse ergometer

model: ergo\_lyps Premium 88

article number: 9150382 / 9150384

complies with all applicable requirements of the following prescriptions:

2004/108/EG EMC Electromagnetic Compatibility

2006/95/EG Low Voltage Directive

Applied standards:

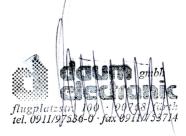
EN 957-1:2005

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**

Braking system: Load range: Speed range: Load precision:	Computer-controlled, full electronic eddy current brake (operating in the speed ranges shown in the diagram on page 33) 25 to 600 Watt 0 to 200 RPM Compliant with DIN EN 957 1/-9 Class SA/HA
Loading levels:	In 1 Watt increments, manually adjustable
Drive:	Single-stage, maintenance-free steel-ribbed belt
Flywheel:	drive in a spring supported drive unit. Machined
Displays:	Colour screen
	256 colours
	320 x 240 pixels/76800 pixels
Heart rate measuremer	it:
	On the ear, measuring range 40 to 200 pulses/min.,
	telemetric using Cardio sensor chest belt
	(optional accessory)
Alarm signals:	Acoustic and optical
Weight:	About 100 kg
Dimensions:	L 227 to 267 cm, W 65 cm, and H 180 cm
Folded:	L 130 cm, W 65 cm, and H 180 cm
Power supply:	230 V alternating current, 50 Hz, 65 W
Safety class:	
ourory ondos.	

### Technical safety recommendations:

Compare the supply voltage on the nameplate on the housing with your local supply voltage prior to plugging the power cord to the power supply. Contact you dealer If the values are not the same.

D

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.

### Areas of application:

This device is suitable for professional and/or commercial utilisation (it is manufactured in compliance with DIN EN 957 1/-9 class SA/HA).

It does not meet the requirements of medical diagnostic applications (clinical use). The maximum weight carrying capacity is 120 kg!



# Maintenance

### Liability

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

### **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.

### **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 of the dashboard holder. Then tilt 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 facing upward.

Reassemble 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.

### Noises

The 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.

### Surface 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.

The handle coatings are wearable parts. These are not covered by the warranty.

# Maintenance

### Replacing the V-belt

### 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.

### DThis 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 vacuum cleaner.

### Proceed 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!

V-belts are wearable parts and as such are not covered by the warranty.

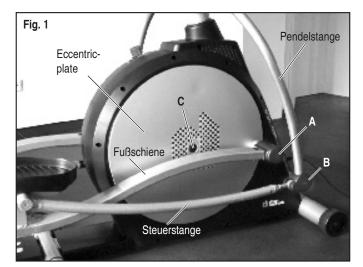
Take particular care to avoid damaging the internal parts of your ergo\_lyps while you are working. The drive unit (pulley and driving shaft) is located on the right side of the device (looking forward). You must therefore remove the side cover on the right side.

- 1. Remove covers A. Remove hinge cover B by removing the screw.
- 2. Unscrew the screw between the driving rod and the oscillating rod. Tilt carefully the oscillating rod upward.
- 3. Unscrew the screw on the foot rod, pull it from the foot rod shaft and lay it down (Fig.2).
- 4. Remove the cover C (Fig. 1) from the eccentric plate.
- 5. Remove (unscrew) the nut under cover C by means of a usual (commercial) crankshaft extractor. Fasten in the crankshaft extractor (Fig. 3), loosen and lift the eccentric plate.
- 6. Pull the old V-belt sideways from the top of the driving pulley (Fig. 4).
- 7. Install the new V-belt starting on the smaller driving pulley, around the tension pulley and on the pulley. The tension pulley will then move to release the tension on the V-belt when needed.

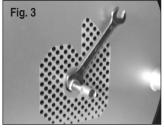
Correctly installed V-belt (Fig. 5).

8. Follow the same steps (1 to 5) in reverse sequence to reassemble the parts

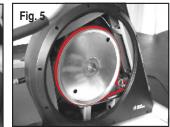
During the reassembly process make sure that foot rod shafts are offset by 180°.



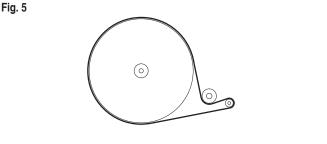












### In the case of a failure ..... what to do if ....?

### In the event of a failure, please check if:

- The data cables are correctly connected.
- -The cable connectors are firmly plugged in.

### 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 serial number of the driving unit (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. The software status of the device:

dashboard software version and power unit software (accessed under menu option: Main menu > Settings > Device data > Update > Version)

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.

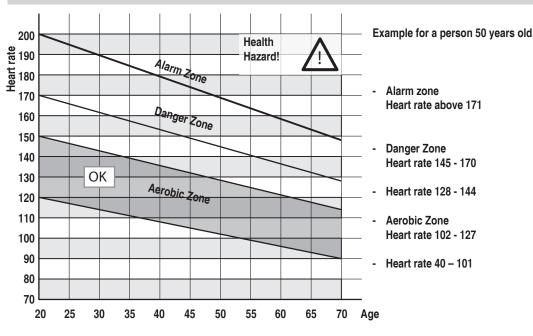
### Table of Target Heart Rate Zones/ Aerobic Zone

### Example:

Heart rate - target zone as a percentage of maximum pulse rate with heart rate limit relative to the age 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**



If a heart rate limit is set up, the load is automatically reduced when the danger zone is reached.

### Aerobic Zone

You should train in the aerobic zone if you want to increase your load capacity. In this zone more glucides get burned than fat.

The benefits of the strengthening have an important impact on the cardiovascular and respiratory systems.

### **Danger Zone**

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

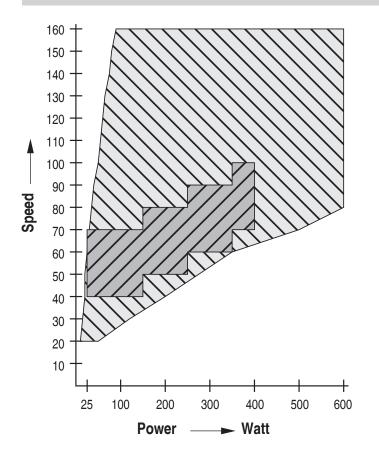
### Alarm Zone

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.

D

# **Tables and Diagrams**

### **Speed Power Diagram**





Maximum Power Zone ergo\_lyps premium88



Conform to DIN EN 957 1/-9

# Accessories (provided as standard)

### 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!

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). The max. card size is 1GByte

Notes about manipulating memory cards (see page 6).

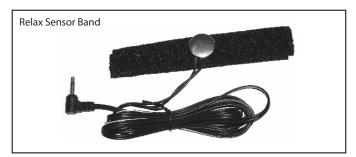
### Ear Clip

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

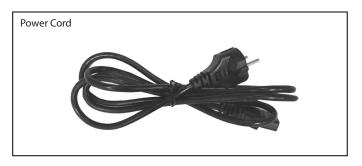


### **Relax Sensor**

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



### **Power Cord**



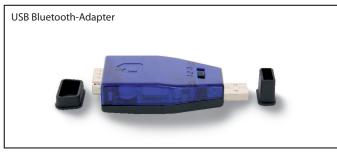


### Multifunction serial/USB Bluetooth-Adapter

The serial/USB Bluetooth-Adapter is intended for wireless connection, Standard Bluetooth 2.0, of the daum training ergometer to a PC. Alternatively it can be used as a USB / serial adapter between the training device and a PC.

Range about 10m (depending on the building conditions)

### Order No.: 9091024



### ergo\_slim card

Loose weight with ease. – a premium training program developed by Dr. med. Wolfgang Siegfried, Insula, Berchtesgaden.

DAS interactive training program for anyone overweight who wish to loose weight.

### Order No.: 9091030



### **Floor Protection Mat**

Dimensions: 220 cm x 100 cm Colour: Transparent

Order No.: 0810402

You will find more accessories on our Internet site at: www.daum-electronic.de

### Cardio Sensor Chest Belt (Special Accessory)

The chest belt 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 belt (non coded):

1 Skin-friendly Cardio Sensor chest belt with integrated pulse sensor and transmitter

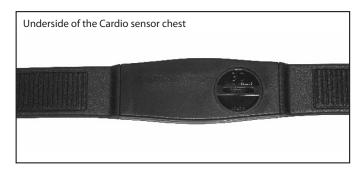
1 Adjustable elastic strap to attach it to your chest Order No. 90 91 015





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.



### ergo\_win premium pro PC Software (EWPP)

Daum ergo\_win premium pro connects training partners worldwide. With a PC and via Internet it is now possible to train with friends, similarly minded persons, and training specialists – using a web cam and headset it is also possible to communicate with image and sound. Sport enthusiasts can participate to international online races and online group rides.

- Multi-user capable
- Detailed personal setting possibilities
- Supports the ergo\_memo card1 and ergo\_memo card2
- Participation to online training over daum training server
- Participation to group training / network races
- Presenting your own group training / network races
- Supports Webcam / Headset
- Detailed training overview
- Detailed training evaluation with average and maximal values, heart rate / watt graphs and display training details with a precision of (up to) one second
- Generate your own training programs
- controls 4 training devices simultaneously
- Superimposing of the training details of each training device
- Visualising the limit values
- Supports the Daum TRS Relax system
- Ten picture and sound channels
- User friendly interface
- Training program manager
- Training data manager
- Memory card manager
- Backup manager
- Training program Import / Export
- Endless training over web server available And much more

### Order No. 9091 026

### ergo\_win race edition PC software (EWRE)

The Race Editional soallows with a PC toparticipate to the Daum Online Ergometer Training over Internet. The Race Edition can only be used for Online Training.

This PC software is available free of charge on our web homepage: www. daum-electronic.de under Support > premium line >  $\dots$  accessories (with installation instructions and user guide).

### ergo\_memo-card2 Editor

The ergo\_memo-card2 Editor (emc2-Editor) is intended specially for the ergo\_memo-card2. The editor is used to modify or to export the data on the ergo\_memo-card2. An exact evaluation of the data can then be carried out (e.g. in Excel, etc.).

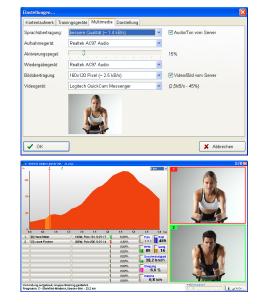
This PC software is available free of charge on our web homepage: www.daum-electronic.de under Support > premium line > ... accessories (with installation instructions and user guide).

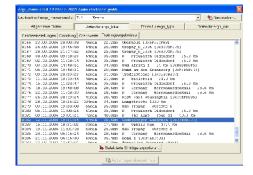
### **Premium Program Editor**

The premium program editor allows to create training programs with image and sound (premium programs).

This PC software is available free of charge on our web homepage:

www.daum-electronic.de under Support > premium line > ... accessories (with installation instructions and user guide) starting from the third quarter of 2007.





# Sample configurations (Annex to the group training section pages 22-23)

### Network on location (only IP addresses)

### Configuration

- 1) Identify each device with a label "device 1", "device 2", etc.
- 2) Proceed with the following settings under Menu -> Settings -> Device data -> Network

Menu	Settings
DHCP	No
IP Address	192.168.10. <device number=""></device>
	Example for device 1 => 192.168.10.1
Gateway	0.0.0.0
Subnetmask	255.255.255.0
DNS-Server	0.0.0.0

3) Leave the network menu and confirm the settings by selecting "yes".

4) Enter the respective IP addresses of the other devices under Menu -> Training -> Group training -> participants.

5) Leave the menu.

6) Connect all the devices using a network cable to a switch. Pay attention when you buy a switch that it have enough capacity to connect all the devices. Do you plan an addition in the future?

The devices are now interconnected into a network, i.e. they can be used to execute a group training.

### Group training

1) The participant who is taking the server role choose the required program and give the other participants the name of his device.

2) The other participants choose in the participants list the IP address with the last digit of the server device number and connect to the server.

### Network on location (DHCP and DNS server available)

### Configuration

- 1) Identify each device with a label "device 1", "device 2", etc.
- 2) Proceed with the following settings under Menu -> Settings -> Device data -> Network

Menu	Settings
DHCP	Yes
IP Address	any, unused with DHCP
Gateway	any, unused with DHCP
Subnetmask	any, unused with DHCP
DNS-Server	any, unused with DHCP

3) Leave the network menu and confirm the settings by selecting "yes".

4) Enter fixed IP addresses for the MAC addresses in the DHCP server.

5) Enter the device names for the corresponding IP address in the DNS server.

6) Enter the respective device names of the other devices in Menu -> Training -> Group training -> participants.

7) Leave the menu.

8) Connect all the devices to the location network with network cables.

The devices are now interconnected into a network, i.e. they can be used to execute a group training.

### Group training

1) The participant who is taking the server role choose the required program and give the other participants the name of his device.

2) The other participants choose in the participants list the corresponding device name and connect to the server.

D

# Configurations

### Connecting two devices (only IP addresses)

### Configuration

- 1) Identify each device with a label "device 1", "device 2".
- 2) Proceed with the following settings under Menu -> Settings -> Device data -> Network

Menu	Settings
	<u> </u>
DHCP	No
15 4 1 1	
IP Address	192.168.10. <device number=""></device>
	Example for device 1 => 192.168.10.1
	Example for device 1 => 132.100.10.1
Gateway	0.0.0.0
Subnetmask	255.255.255.0
DNS-Server	0.0.0.0

- 3) Leave the network menu and confirm the settings by selecting "yes".
- 4) Enter the respective IP address of the other device under Menu -> Training -> Group training -> participants.
- 5) Leave the menu.
- 6) Connect all the devices using a crossover cable.
- The devices are now interconnected into a network,
- i.e. they can be used to execute a group training.

### Group training

- 1) The participant who is taking the server role choose the required program and give the other participant the name of his device.
- 2) The other participant chooses in the participants list the IP address with the last digit of the server device number and connects to the server.

### Internet connection with Premium/Medical as Client

- 1) Connect the device with a network cable to the DSL or ISDN router.
- 2) Make sure that the access data for internet are correctly set in the router.
- 3) Proceed with the following settings under Menu -> Settings -> Device data -> Network

Menu	Settings	
DHCP	Yes	
IP Address	any, unused with DHCP	
Gateway	any, unused with DHCP	
Subnetmask	any, unused with DHCP	
DNS-Server	any, unused with DHCP	

4) Leave the network menu and confirm the settings by selecting "yes".

5) Enter the respective web addresses or IP addresses of the servers in Menu -> Training -> Group training -> participants.

6) Leave the menu.

Your device is now connect to Internet via your router.

### Group training

You can connect to other servers by selecting them in the participants list.



### Configuration

- 1) Connect the device with a network cable to the DSL or ISDN router.
- 2) Make sure that the access data for internet are correctly set in the router.
- 3) Proceed with the following settings under Menu -> Settings -> Device data -> Network

Menu	Settings
DHCP	No
IP Address	a free IP address from the number domain of the router. Make sure there are no duplicates!
Gateway	Usually the IP address of the router
Subnetmask	Generally 255.255.255.0
DNS-Server	Usually the IP address of the router

4) Leave the network menu and confirm the settings by selecting "yes".

5) Leave the menu.

6) Open port 1366 in the firewall of the router for TCP and enter as end point the IP address of you device.

**Note:** if your router allows the fixed assignment of an IP address to a specific MAC address over DHCP, then set in point (3) above DHCP to "yes". And enter the required IP address for the MAC address of the device in the router!

Your device is now connected to Internet via your router.

### Group training

Your device can be used as server by others, i.e. other participants can connect to your device provided you give them your actual IP address used in Internet. You can find out what is the IP address used in Internet after you connect to Internet by consulting the web site www.whatismyip.com with a PC.

**Note:** normally the IP address used changes every time you connect to internet. If you want to take the server role on a regular basis then you should use a Dynamic DNS service!

### Using a Dynamic DNS as server

Many modern routers offer the possibility to use Dynamic DNS services, which will make it easier for other to connect as clients. Below is the process to do this.

### Configuration

- 1) Register with a dynamic DNS service supported by your router. The service will provide you with your access data and a web address, or you may have the possibility to choose one, e.g. bikeathome.dynalias.net
- 2) Enter the corresponding access data for the dynamic DNS service in the router.
- 3) Give the assigned or chosen web address to the clients, the clients will have to enter this address.

### What do you get?

1) The other participants do not need to enter a new IP address every time, rather they can choose the same web address.

2) You can be used as server by others, i.e. other participants can connect with you

D

### Terms and abbreviations

This chapter presents all the terms and abbreviations used in this document. We would like to point here that the descriptions given here are meant for end users and differ certainly from the formulation of networking professionals.

Term /Abbreviation	Description
Client	participant to a training who did not start the training.
DHCP	Dynamic Host Configuration Protocol, i.e. protocol to automatically configure the network interface of a device (PC/ training device) through a e.g. router.
DNS	Domain Name Server, i.e. a server that converts an entered name into an IP address.
dynamic IP	IP address assigned by e.g. DHCP or a similar process. The IP address can change with every new connection to the network.
DynDNS	Dynamic DNS, i.e. dynamic Domain Name Server to resolve names/web addresses into IP addresses.
ergo_win cable	serial connection cable provided with ergo_win.
Firewall	Software in a PC or router used to prevent unauthorised connections to the device (PC/training device).
Group training	Training of many users together over a network.
IP address	the "address" of a training device or a PC, made up of 4 numbers separated by dots, e.g. 192.168.10.1
Network race	previous name for group training.
Router	provides to many devices (PC/training device) a connection to another network. Example: DSL Router
Server	Participant who starts a training, all other participants are clients.
Static IP	an fixed IP address. It is generally used in small, local networks.
USB-Serial Adapter	Serial interface used to connect to the USB Port of a PC.
Web address	a name that can be resolved into an IP address by DNS.

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- 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, with the exclusion of customer claims not related to those categories through upgrading 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).
- 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.
- 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 transmitted in writing.
- 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.
- 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 this service, 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 (www.daum-electronic.de). You can also call us on our repair hotline at daum electronic gmbh (telephone number ++49 / (0) 911 / 97 536 - 0).

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Version 2, June 1991

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Also add information on how to contact you by electronic and paper mail.

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The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

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signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

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