

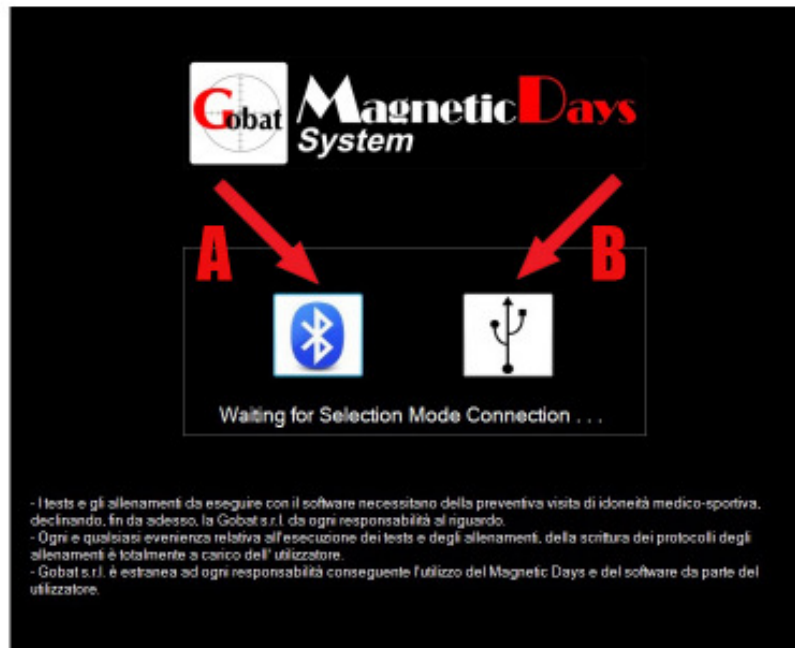
PC SOFTWARE MANUAL

.4.11

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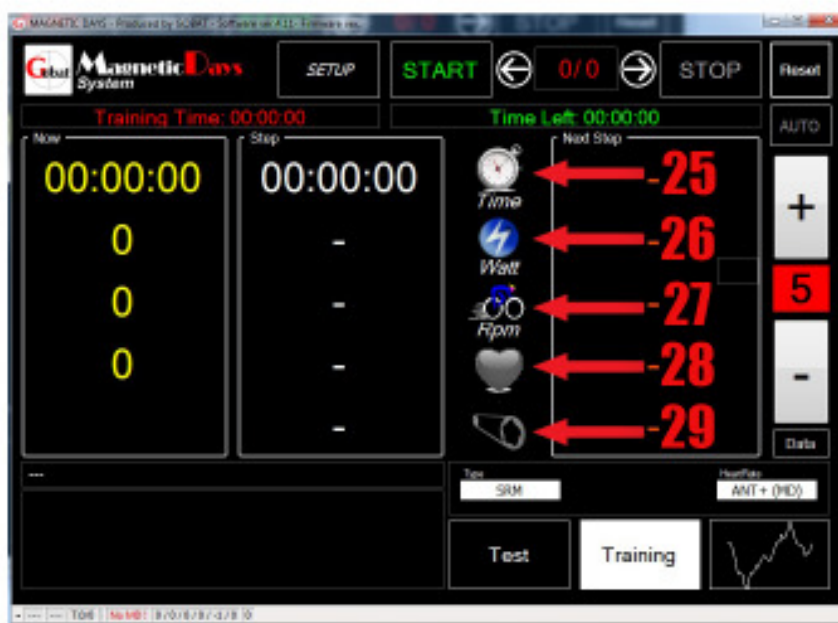
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SELECTION OF MAGNETIC DAYS / PC CONNECTION



- A - BLUETOOTH** - the MD/PC connection is by Bluetooth. The connection is a function of the electronics installed on the MD.
 BT3 - Connection via Bluetooth 2
 BT4 - Connection via Bluetooth Low Energy
 The connection is also a function of the type of the Bluetooth device in the PC. The connection procedures required by the Computer depend on the operative system installed.
- B - USB** - The MD/PC connection is by USB cable.
 The MD being recognised by the PC is a function of proper driver installation when downloading and installing the MD software on your computer. The supported systems are XP / Vista / W7 / W8.

ICONS



- 25 - TIME - The icon indicates the active time of use expressed in Hours / Minutes / Seconds
It is activated by pedalling.
- 26 - WATT - The icon indicates the power applied during pedalling. The value is expressed
in Watt and is the product of the applied force (Newton) by the speed (RPM)
- 27 - RPM - The icon indicates the RPM (Rounds per Minute)
- in training meant as pedalling rate per minute
- 28 - BPM - The icon is the Heart Rate expressed in Beats per Minute
- 29 - GEAR - The icon represents the Mechanical ratio (gear setting) to be used during training

FUNCTIONS SCREEN 1



- 1 - NOW - The panel indicates the values expressed instantly when reading information of a free job, where the value of the Watts depends on the ratio used, of the generated RPM and the set brake value, the information will show in YELLOW. When using TRAINING (Training programme), press the Start key to initiate a Training programme, the colour of the information turns GREEN confirming that the system is restricted by the information already programmed in the training programme.
- 2 - STEP - The panel indicates the values required at the time by the single step of the Training programme. The information appears only if a Training programme has been loaded. The information colour is always WHITE
- 3 - NEXT STEP - The panel indicates the values required by the next step of the Training programme. The information only appears if a Training programme has been loaded. The information colour is always RED

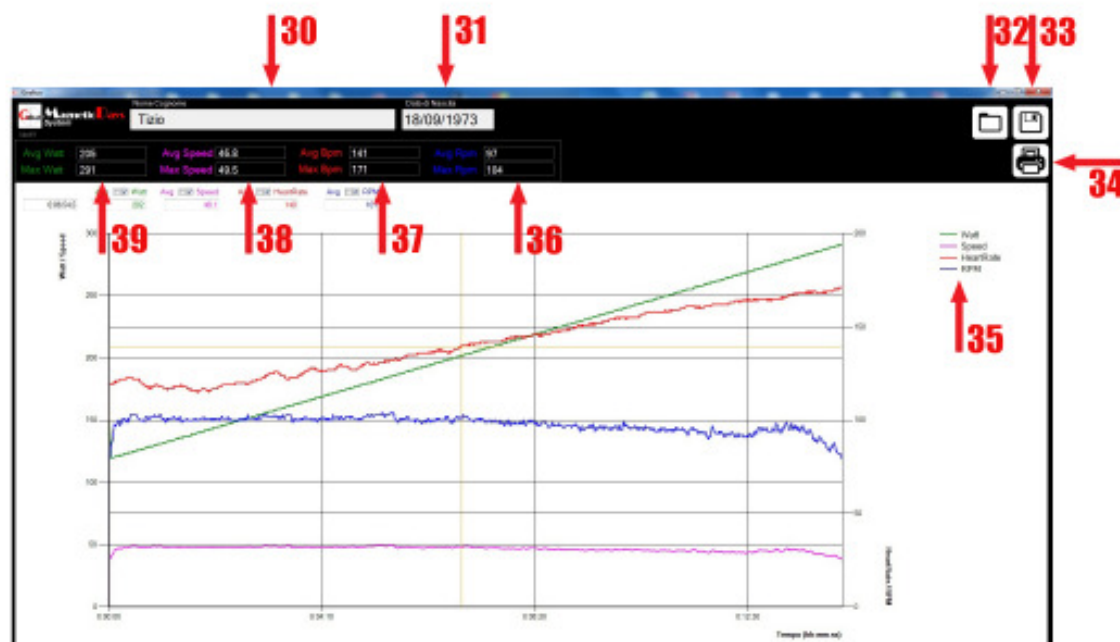
FUNCTIONS SCREEN 2



- 4 - SETUP - The key allows you to access the system settings screen
- 5 - START - The key starts a loaded training programme
- 6 - PREV. The key scrolls back through training programme steps
- 7 - STEP This shows field shows the current training step in respect to all loaded training steps
- 8 - NEXT The key scrolls forward through the steps of a training programme
- 9 - STOP The key interrupts the training programme
- 10 - RESET The key resets from the beginning of the training programme
- 11 - AUTO This button turns on / off the system AUTO function
- 12 - PLUS This allows the increase in brake positions when in Manual function and increases the Watts when in Auto function

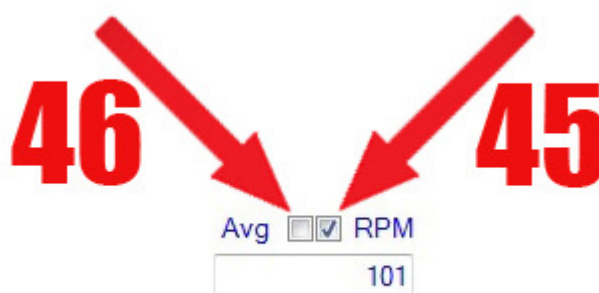
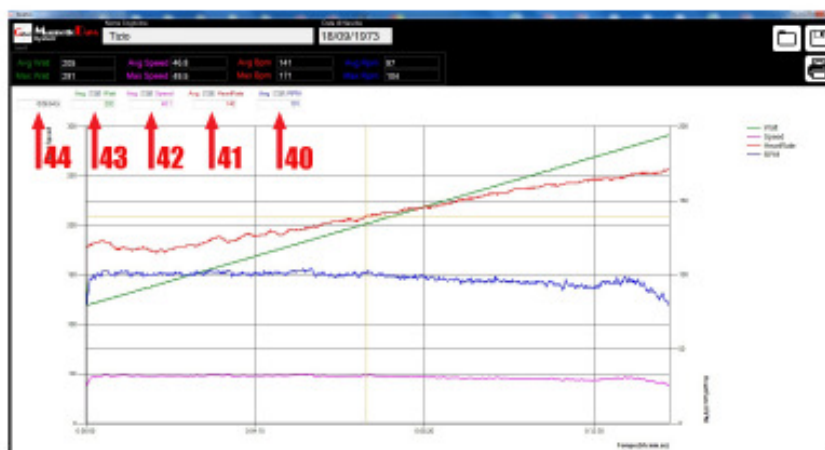
- 13 - BRAKE - The field displays the brake position when running Manual. If in Auto, the field shows the letter "A"
- 14 - MINUS - The key allows the decrease of the brake position when in Manual and the decrease of the Watts when in Auto
- 15 - DATA - The key allows access to the personal details input screen for synchronization with the Magnetic Days Cloud
- 16 - VIS. SETUP - The field shows the main settings information set in the screen. The first figure on the left indicates the source of the information system (Magnetic Days / SRM). The second field indicates the level of filter information added. The third field indicates the setting of the heart rate monitor
- 17 - GRAPH. - The key allows access to the graphics screen on which it is possible to SAVE a completed training session
- 18 - TRAINING - The key allows access to the Create / Loading training programmes screen
- 19 - TEST - This key allows access to the test protocol Loading screen
- 20 - NOTE - This field displays the notes of the training programme step in execution at the time
- 21 - TITLE - The field displays the name of the training programme in execution at the time
- 22 - TRAINING TIME - The field displays the total duration of the loaded training programme
- 23 - TIME LEFT - This field displays the time remaining until the end of the training programme
- 24 - GEAR REQUEST - The field displays the gear that will be required by the programme step training following the one in execution. The value can be
 A - if the step will be with an automatic gear
 1/25 (1/30 for increased gears) - the value of the gear expected, when working with constant gear (progressions for example)
 .

FUNCTIONS SCREEN 3



- 30 - ATHLETE** - The field shows the name of the Athlete who is doing the training programme
- 31 - DATE** - The field shows the date of birth of the Athlete who is doing the training programme
- 32 - LOAD** - The key lets you reload a completed training programme for analysis. Press the key to access Windows to search for the desired file
- 33 - SAVE** - This key allows you to save the completed training programme. Press the key to access Windows to search for the destination folder and confirm the back up
- 34 - PRINT** - The key allows printing of the graph. Press the key to access Windows to select the printer
- 35 - LEGEND** - This field contains the explanation of the colours of the value curves. The key realigns from the start of the training programme

- 36 - AVG/MAX - The two fields show the values of the average and maximum RPM (Pedalling frequency) generated during the entire exercise
- 37 - AVG/MAX - The two fields show the values of the average and maximum BPM (Heart rate) generated during the entire exercise
- 38 - AVG/MAX - The two fields show the values of the average and maximum SPEED generated during the entire exercise
- 39 - AVG/MAX - The two fields show the values of the average and maximum WATTs (Power) generated during the entire exercise

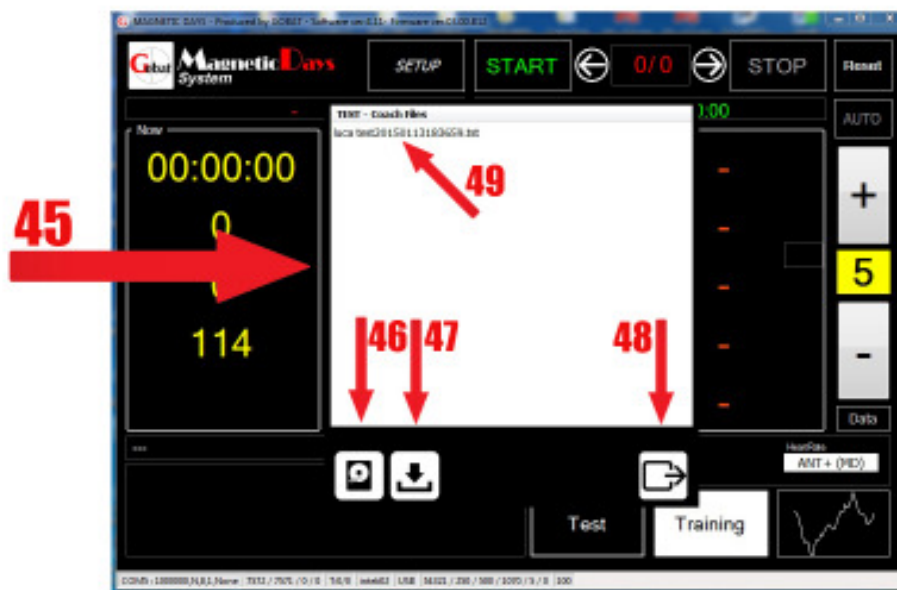


- 40 - SELECTION - RPM
In the three fields system, you can tick the value of the curve that you want displayed (45 for Pure values and 46 for average values) related to the RPM parameter. The lower field displays the recorded value of the RPM at the point selected with the cursor in the graph
- 41 - AVG/MAX - BPM
In the three fields system, you can tick the value of the curve that you want displayed (45 for Pure values and 46 for average values) related to the BPM parameter . The lower field displays the recorded value of the BPM at the point selected with the cursor in the graph

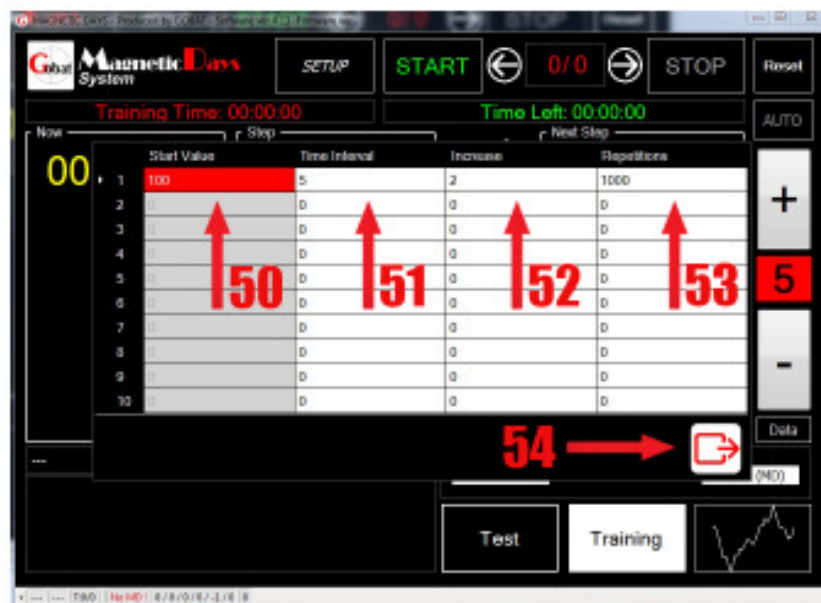
- 42 - SELECTION - SPEED** In the three fields system, you can tick the value of the curve that you want displayed (45 for Pure values and 46 for average values) related to the Speed parameter. The lower field displays the recorded value of the Speed at the point selected with the cursor in the graph
- 43 - AVG/MAX - WATT** In the three fields system, you can tick the value of the curve that you want displayed (45 for Pure values and 46 for average values) related to the WATT parameter. The lower field displays the recorded value of the WATT at the point selected with the cursor in the graph
- 44 - TIME** - . The field displays the time from the start of training, corresponding to the point selected with the cursor in the graph
- .

FUNCTIONS SCREEN 4

LOADING TEST PROTOCOLS



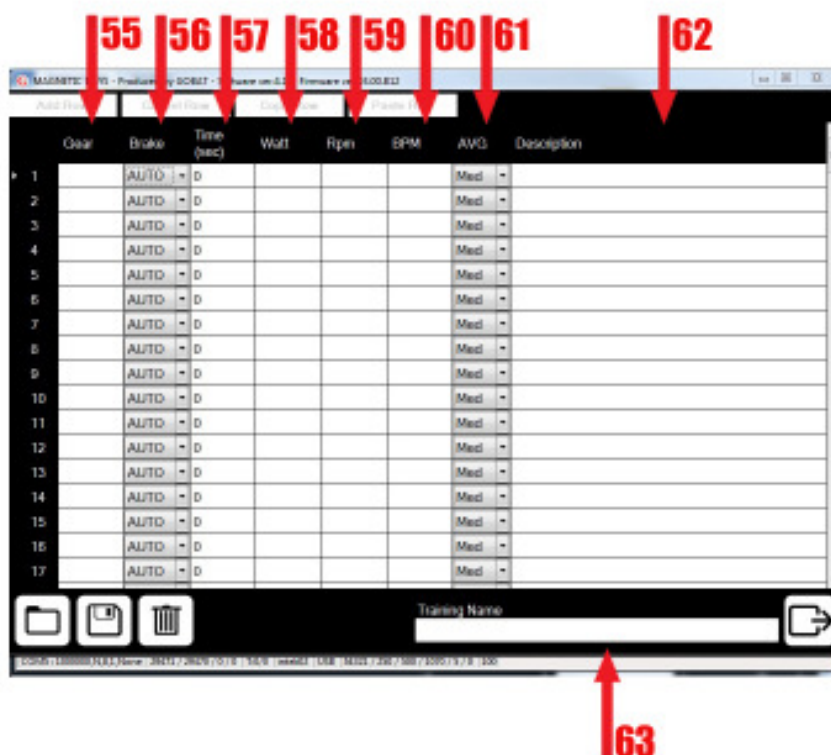
- | | | | |
|------|----------------------|---|---|
| 45 - | LOADING SCREEN | - | The screen on which training protocols and completed training sessions transit. |
| 46 - | UPLOAD FROM MEMORY | - | It key allows access to the Windows folder screen to select the test protocol for loading |
| 47 - | DOWNLOAD FROM PORTAL | - | The key allows downloads from the portal to synchronize protocol file/tests carried out between the MD web page and the PC memory |
| 48 - | ENTER | - | This key allows loading of selected files |
| 49 - | FILE | - | This list shows all available files, divided by the code between Test Protocols to run and completed tests. Selecting the desired file prepares the loading |



- 50 - START POWER - The field indicates the starting power of the test
- 51 - TIME INTERVAL - The field shows the duration of the step increase
- 52 - INCREASE - The field shows the increase value of the step power
- 53 - REPETITION - This field shows the number of repetitions set for the step. With this field you can set incremental variable Protocols

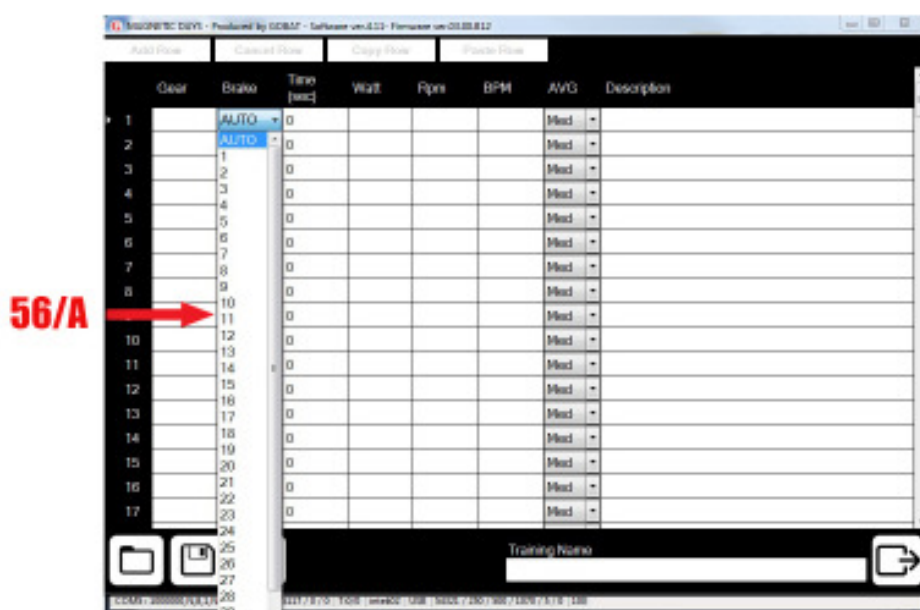
FUNCTIONS SCREEN 5

LOADING WORKOUTS

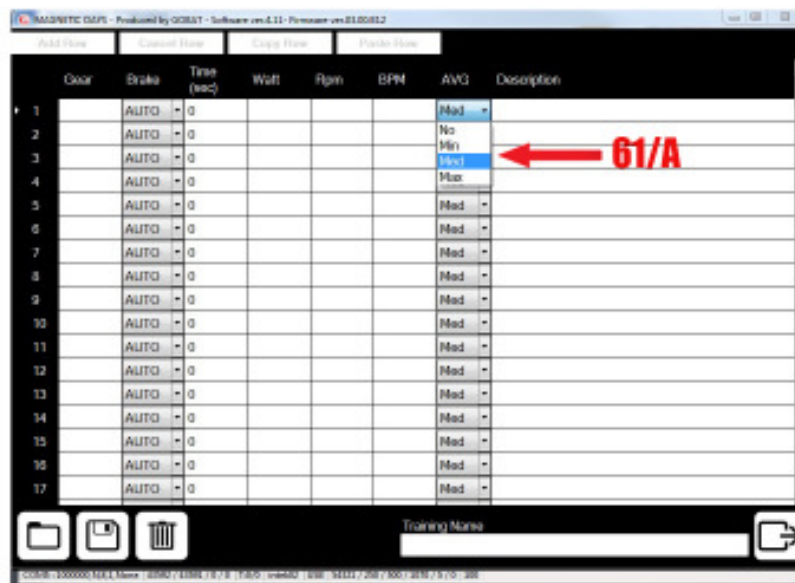


- 55 - GEAR - In this field you insert the indicated ratio to obtain, with a fixed brake, the value of watts required in function of the set RPM. The field is alphanumeric and writing is unlimited. The field is optional
- 56 - BRAKE - In the field you choose the brake value (1-25 or 1-30) required in the training step or AUTO (default) that sets the system to dispense the resistant force inserted in the "WATT" regardless of the ratio used and by applied RPM
- 57 - TIME - In the field you enter the Time value (in seconds) of the training step duration. The field is COMPULSORY
- 58 - WATT - In the field you enter the Watt value required by the training step. If Auto Brake is chosen, this field becomes the step MASTER
- 59 - RPM - In the field you enter the RPM value required by the training step. The field is alphanumeric and you can write either direct value indications or alphabetic indications such as "FREE"

- 60 - HEART FREQ. - In the field you insert the BPM number provided for in the training step. This field is optional.
- 61 - FILTER - Nel this field you choose the reading filter value for the single training step. The default value is MED.
- 62 - DESCRIPTION - In the field you write the description of the single training step
- 63 - TRAINING NAME - The field contains the name of the training programme. In case of direct writing of the workout, the field must be filled before saving the programme itself. In the case of an Upload, the field shall indicate the name given by the Coach to the training programme. The name can be changed for a new back-up



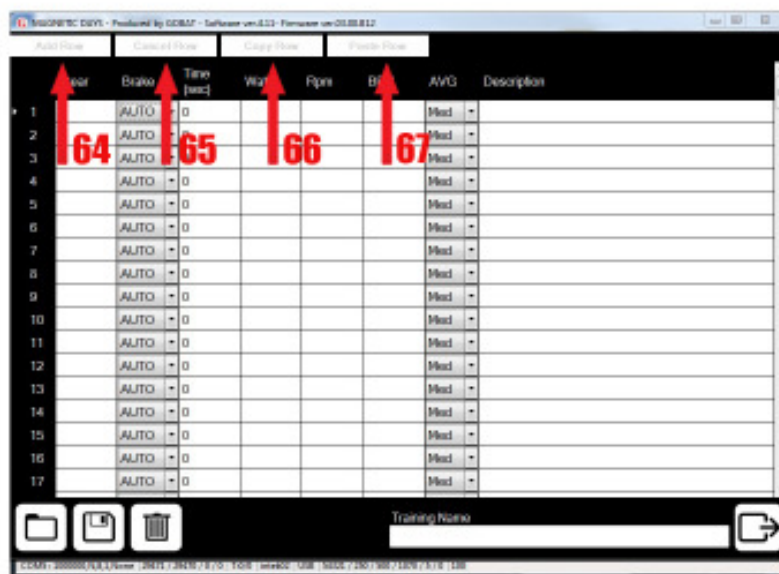
- 56/A - BRAKE MENU - The drop-down menu to choose the brake, in addition to the default “AUTO” field lists all the possible fixed brakes for the MD currently connected to the PC



56/A - FILTER MENU - The drop down menu to choose the reading Filter information of the individual training steps, shows all the filter values that are possible:

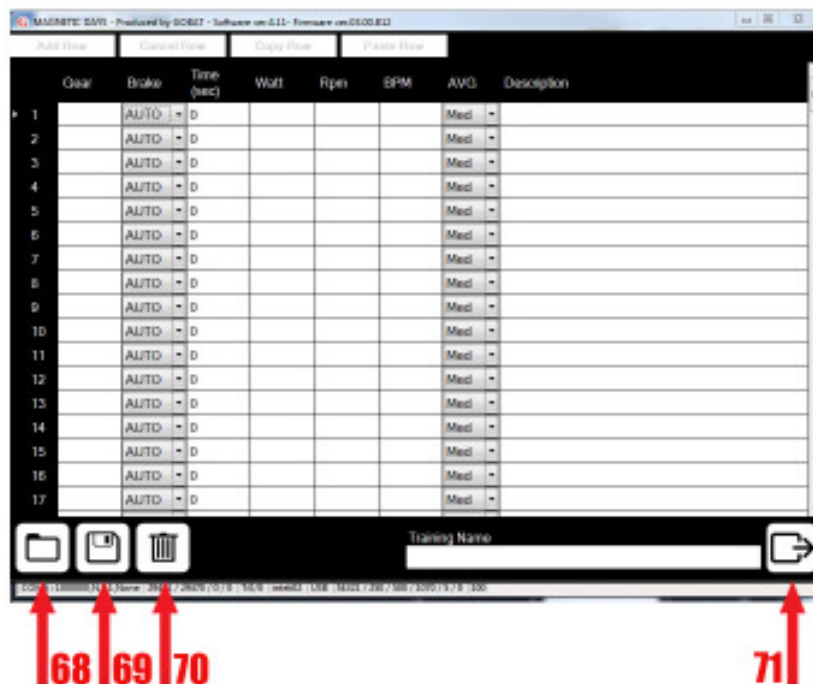
- 0 - No filter. The information displays pure value read every 0.5 sec
- MIN - I information showing the average value every 2 readings (1 sec.)
- MED - I information showing the average value every 4 readings (2 sec.)
- MAX - I information showing average value every 8 readings (4 sec.)

The set default value is MED.



Line	Brake	Time (sec)	Wkg	Rpm	Br	AVG	Description
1	AUTO	0				Med	
2	AUTO	0				Med	
3	AUTO	0				Med	
4	AUTO	0				Med	
5	AUTO	0				Med	
6	AUTO	0				Med	
7	AUTO	0				Med	
8	AUTO	0				Med	
9	AUTO	0				Med	
10	AUTO	0				Med	
11	AUTO	0				Med	
12	AUTO	0				Med	
13	AUTO	0				Med	
14	AUTO	0				Med	
15	AUTO	0				Med	
16	AUTO	0				Med	
17	AUTO	0				Med	

- 64 - ADD ROW** - In this field you enter the line number you want to add when creating the training programme.
- 65 - CANCEL ROW** - In this field you enter the line number you want to delete when creating a training programme. One or more lines may be selected
- 66 - COPY ROW** - In this field you enter the line number you want to copy when creating a training programme. One or more lines may be selected
- 67 - PASTE ROW** - In this field you enter the line number you want to paste when creating a training programme. One or more lines may be selected



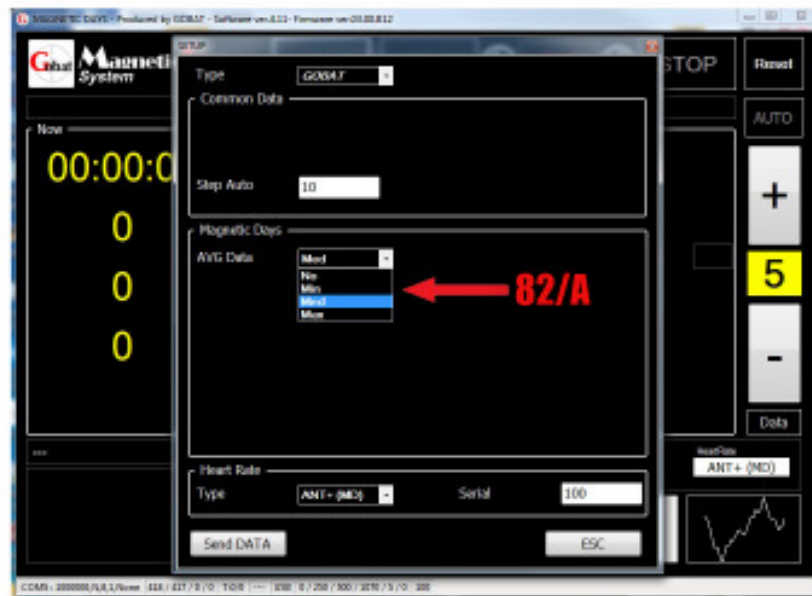
- 68 - LOAD PROGRAM - Press the button to access the Windows screen to load a training programme contained in the computer memory.
- 69 - SAVE PROGRAM - Press the button to access the Windows screen to save a written training programme in the computer memory.
- 70 - CANCEL PROGRAM - Pressing the button deletes the training programme at the time displayed in the writing window.
- 71 - EXECUTE PROGRAM - Pressing the button switches the displayed programme to the execution function.

SETUP FUNCTIONS1

Magnetic Days



- 4/A** - SCREEN - The main system settings window
- 80** - SOURCE - The drop-down menu allows the selection of the source of visualised information. You can choose between the Magnetic Days internal mathematics system or the Ant+ radio signal from the Powermeter SRM
- 81** - INCREASE - In the field you can enter the desired watts increase / decrease value
WATT



82 - FILTER - With the drop-down menu you can choose the reading filter for the system information,
82/A when the source of information is MD and working according to Manual or Auto (No Training operation). The possible values are:

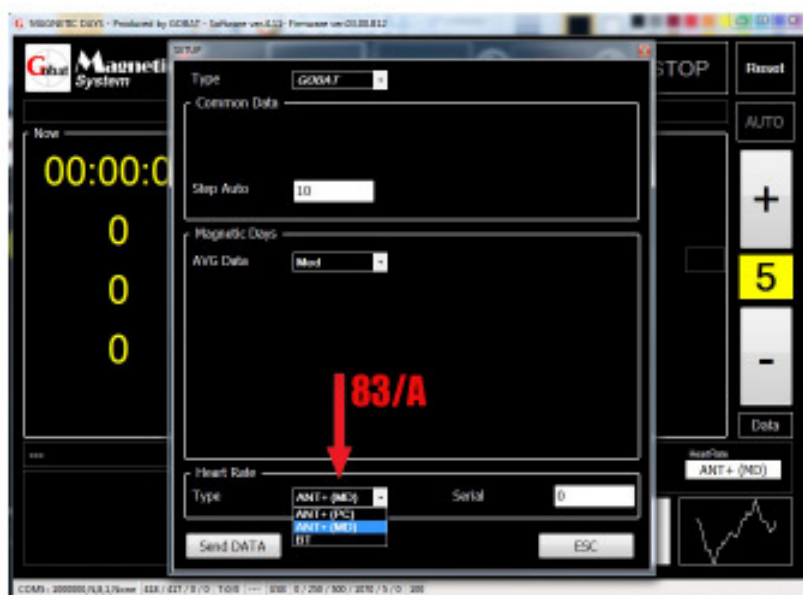
0 - No filter. I information displays the pure value read every 0,5 sec.

MIN - I information displays the average value every 2 readings(1 sec.)

MED - I information displays the average value every 4 readings (2 sec.)

MAX - I information displays the average value every 8 readings (4 sec.)

The set default value is MED



- 83** - HEART - With the drop-down menu you can choose the type of connection to the system
83A MONITOR for your heart rate monitor.
The possible choices are:

ANT+ MD - With the drop-down menu you can choose the type of connection to the system for your heart rate monitor.

ANT+ PC - Having an Ant +heart rate monitor connect the the system via an Ant +USB pen inserted into the PC or included inside the Tablet / Smartphone used

BT - Having a Bluetooth heart rate monitor connect to the system via the PC Bluetooth connect the Tablet / Smartphone used. The compatibility between the band and the device depends on the operating systems of the individual components.

- 84** - MONITOR
CODE The MD with BT4electronics transmits its information to Tablet / Smartphone devices through a Bluetooth Low Energy antenna. In the case of choice ANT + MD the heart rate also reaches the devices via BT even while using an Ant + band. For this connection, devices with the Android operating system, must have a version of not less than 4. 3 installed.

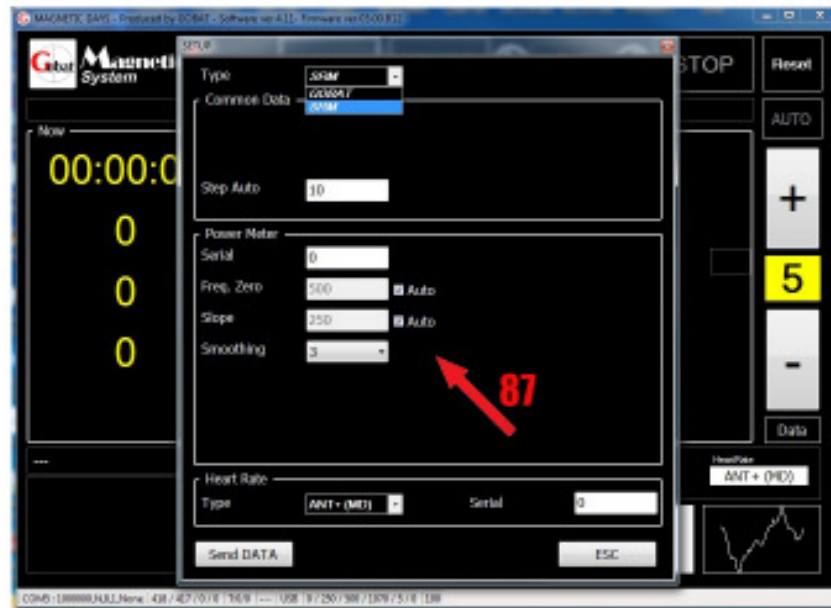
The set default value is ANT+ MD.

Using an Ant +heart rate monitor, you enter the same code in the window so that, in the presence of more MDs and more monitors, each system has a closed connected without any interference. Setting the value to 0 (zero) and turning on a monitor, the system captures and stores the monitor code . To connect the MD to a new band, the should value be reset to 0.

- 85** - SEND DATA - The key allows the MD to store the entered setting
- 86** - EXIT - The key allows exit from the settings screen

SETUP FUNCTIONS 2

SRM



- 87** - **SETUP** - Selecting the source of information from the SRM PowerMeter, leads to the
SRM setting fields for coupling Ant + with the SRM system.
The settings in the fields for Watt Step (81), Heart Rate Monitor (84 and 84) and the two function keys (85 and 86) remain valid.

When the SRM is selected the graphics of the NOW information display panel changes. Instead of having all the fields in YELLOW, the information fields acquire a colour depending on the data:

TIME - YELLOW
WATT - GREEN
RPM - BLUE
HEART - RED

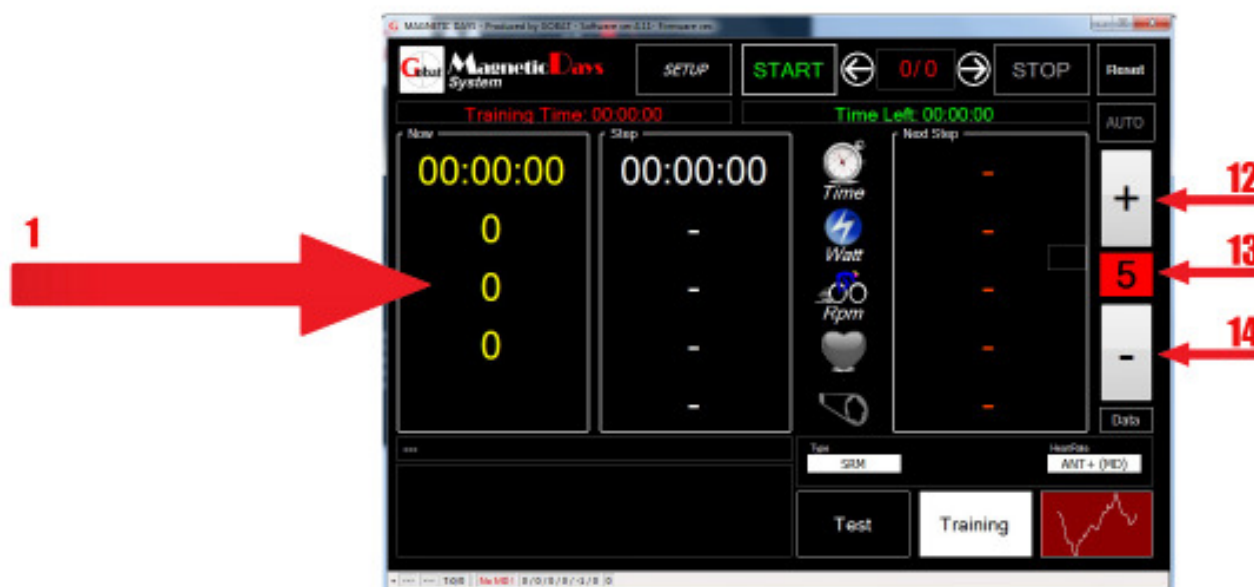
SETUP FUNCTIONS 3

PERSONAL DETAILS



- | | | | | |
|-------------|---|------------------------|---|--|
| 15/A | - | SCREEN | - | The main window for entering personal details for the synchronization of the Magnetic Days cloud |
| 88 | - | NAME | - | Name of the Training System User |
| 89 | - | SURNAME | - | Surname of the Training System User |
| 90 | - | D.O.B. | - | Date of birth of the Training System User |
| 91 | - | ID | - | Login registration to the Portal www.magneticdays.com . This data is essential for the correct synchronization with the cloud and the resulting file exchange. |
| 92 | - | PASSWORD | - | Password for the Training System User registration to the Portal www.magneticdays.com . This data is essential for the correct synchronization with the cloud and the resulting file exchange. |
| 93 | - | SERIAL
NUMBER
MD | - | Serial Number of the Magnetic Days used for test/training |
| 94 | - | ENTER | - | Confirmation key for information input |
| 95 | - | CANCEL | - | Cancel key for information input |

FUNCTIONS FOR USE 1 MANUAL



The MANUAL use function of Magnetic Days allows easy visualization of one's own information during use. The only panel where the information appears is to the left "NOW". The information, if Magnetic Days mathematics are selected, will appear in YELLOW (Coloured according to function if SRM is selected - See p. 22).

The system is ACTIVATED by pedalling and LOCKS automatically when movement ceases.

Once activated, timing starts and instantly displays the WATTS, maintained RPM and BPM (Heart Rate) information. All the generated information is recorded (a series every 0.5 sec.). The information stability of depends on the filter used (default MED).

With the keys PLUS (12) and MINUS (14) you can alter the brake strength, choosing one of the 25 positions (30 in the case of increased brake - MD6-30). The brake position is displayed in the window 13.

(In the case of use of the MD with a manual brake - MD4-6 - you will have to set one of the six possible manual brake positions).

In this situation, the braking force of MD will depend on the set brake of maintained RPMs and which bicycle gear is used.

Acting on these three parameters you will have to check the WATT / RPM ratio required for the work to be carried out on the Platform.

To facilitate pre-setting of the parameters, a useful tool is the Magnetic Days CALCULATOR that for each combination of settings; Ratio / Brake / RPM, gives the relative number of Watts dispensed.

FUNCTIONS FOR USE 2

AUTOMATIC



The **FIRST** function of AUTOMATIC use of Magnetic Days allows easy viewing of your information, as with the previous function, but with the big difference of being able to **FIX** the dispensed WATT value regardless of the ratio used and by the RPM applied. To activate it, simply press the **AUTO** key (11) while pedalling. From that moment on, the system will ensure (within the operating margins of the brake calliper) a resistant force such as to dispense the Watt value displayed upon activation of the function. The value will be automatically maintained, intervening on the gears of the bicycle or by varying the pedalling frequency (RPM). When the function is activated, the letter “A” appears in the brake value display field (13). Of course the value of the braking force can be varied during use, simply by pressing the Plus (12) and Minus(14) . On each click of the keys, the braking force will increase or decrease by the value set in the Set Up screen, in Field 81. The only panel where the information appears is to the left “NOW”. The information, if Magnetic Days mathematics is selected, all appear in **YELLOW** (Coloured according to the function if SRM has been selected- See p. 22)

The system is **ACTIVATED** by pedalling and **LOCKS** automatically when movement ceases. Upon activation, timing starts and instantly displays the WATTS, maintained RPM and BPM (Heart Rate) information. All the generated information is recorded (a sequence every 0.5 sec.). The information stability of depends on the filter used (default MED).

In the case of use of the MD with a manual brake - MD4-6 - the function will **NOT** be available.

FUNCTIONS FOR USE 3 TEST



One of the main innovations of Magnetic Days, is the ability to run Incremental Tests that are automatically managed by the system. The test protocols may NOT be written through the use of software, but must be received from your Coach and generated with the Cyber Test professional software. The protocols may be received via USB, via E-mail or downloaded via the Cloud Training System of the www.magneticdays.com portal

Files may be selected in two different ways.

As a first step, on the software main screen press the Test key (19)

At this point, two situations may occur, depending on whether or not the ID and PASSWORD has been entered in the information screen. (See Function Set Up 3)



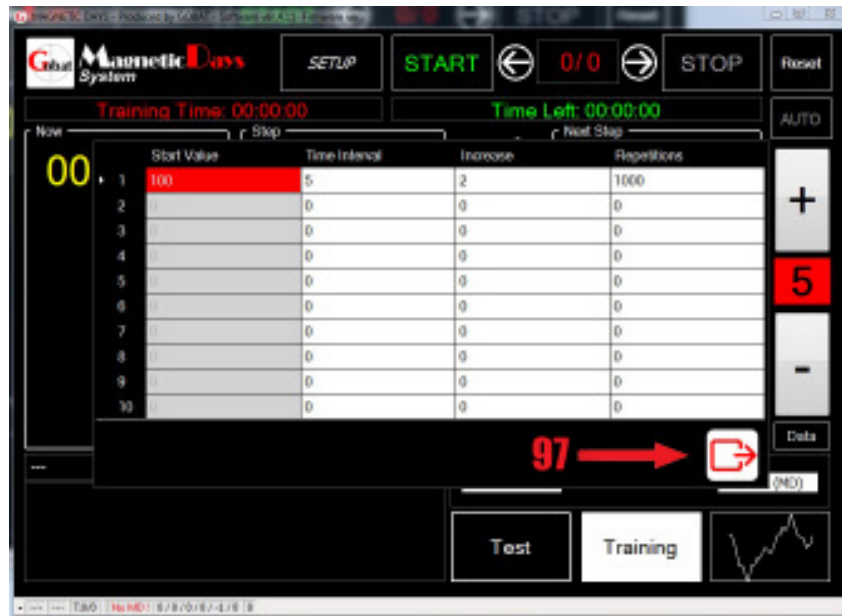
TEST

LOADING DATA WITH CLOUD SYNCHRONIZATION

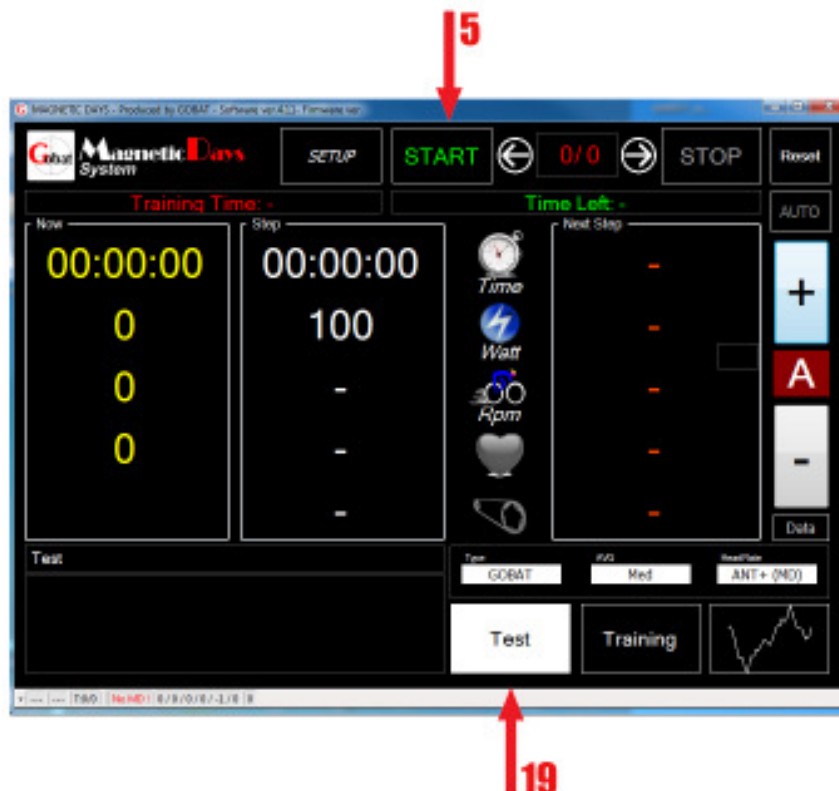


If there is the PRESENCE of ID and PASSWORD entered in the Information screen, the upload / download / synchronization window of the Cloud Training System Portal will open and you can directly select the Test Protocol that you want to run (98). After selecting the Protocol, you load it into the software by pressing the button 99.

The Test Protocol will be displayed window and you can load it for execution by pressing the button 97.



We return to the Main Screen at this point, where the Protocol Test was inserted. This is highlighted by the test button (19) which is now in REVERSE. To start the test, you now need to press the START button (5)





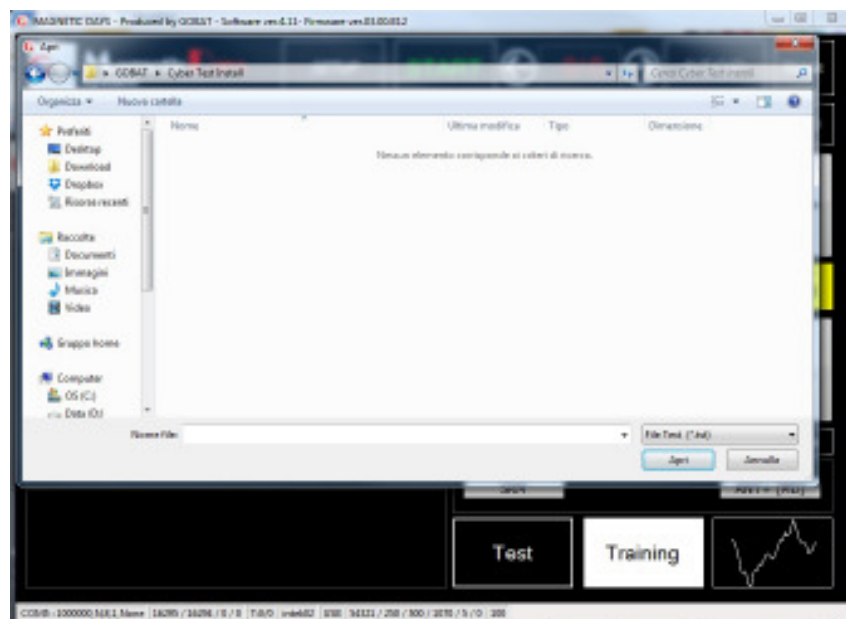
Once you press the Start button, the protocol is ACTIVE.
Numbers in the NOW square turn to GREEN from YELLOW, the TIME (100) starts flashing and the Start Key (5) is transformed into the PAUSE button.

By pedalling the time stops flashing, the information generated in the NOW square appears while the STEP square scrolls the course of the Test Protocol, while the Time indicates in Count Down each individual Protocol step and the Watt value of the step in progress. The system will adjust AUTOMATICALLY to maintain the expected level of Watts, regardless of the ratio used (which will be a fixed ratio, PREFERABLY not lower than 15) and the maintained Pedalling frequency (RPM) (this is IMPORTANT data detected by the test because the Athlete expresses himself in his NATURAL condition for adaptation to stress).
The test continues until the Athlete manages to maintain progressively incremental exertion. The moment you stop pedalling because you go no further, the test will stop automatically.

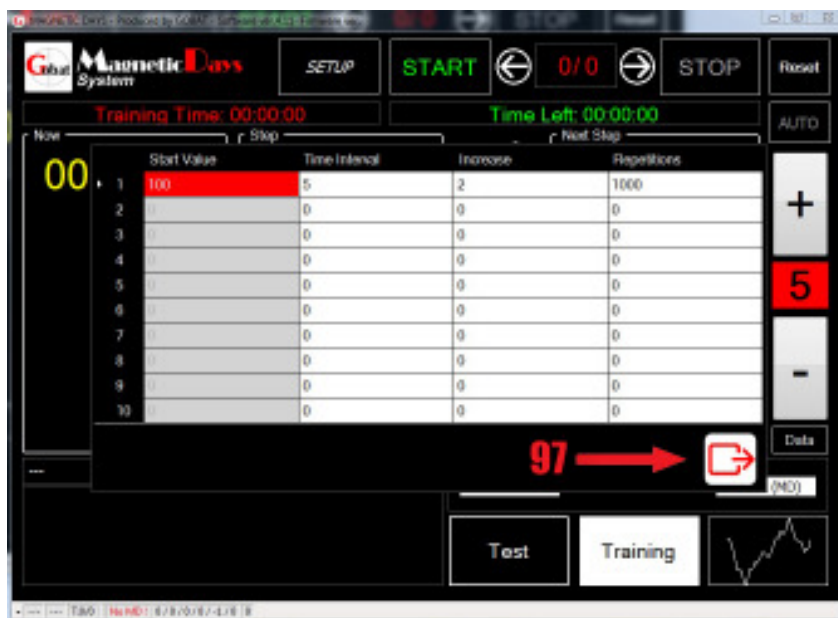
TEST

LOADING DATA FROM THE COMPUTER

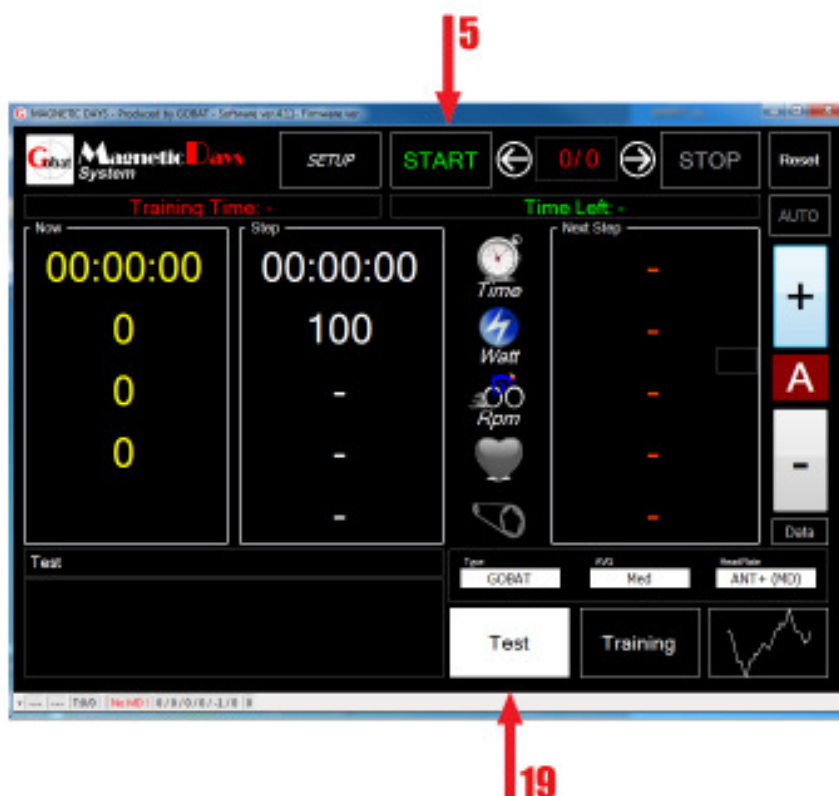
In the case of NO ID and PASSWORD entered in the Information screen, a windows dialogue screen will open in which you can select the Test Protocol that you want to run.
After selecting the file, press OPEN, the Protocol will be loaded into the software.



The Test Protocol will be displayed in the window and it can be loaded for execution by pressing the button 97.



At this point we will return to the Main Screen where the Protocol Test was inserted. This is evidenced by the TEST button (19) which is now in REVERSE. To start the test, you now need to press the START button (5)





Once you press the start button, the protocol is ACTIVE.
 Numbers in the NOW window from YELLOW turn to GREEN, the TIME field (100) starts flashing and the Start key (5) is transformed into PAUSE.

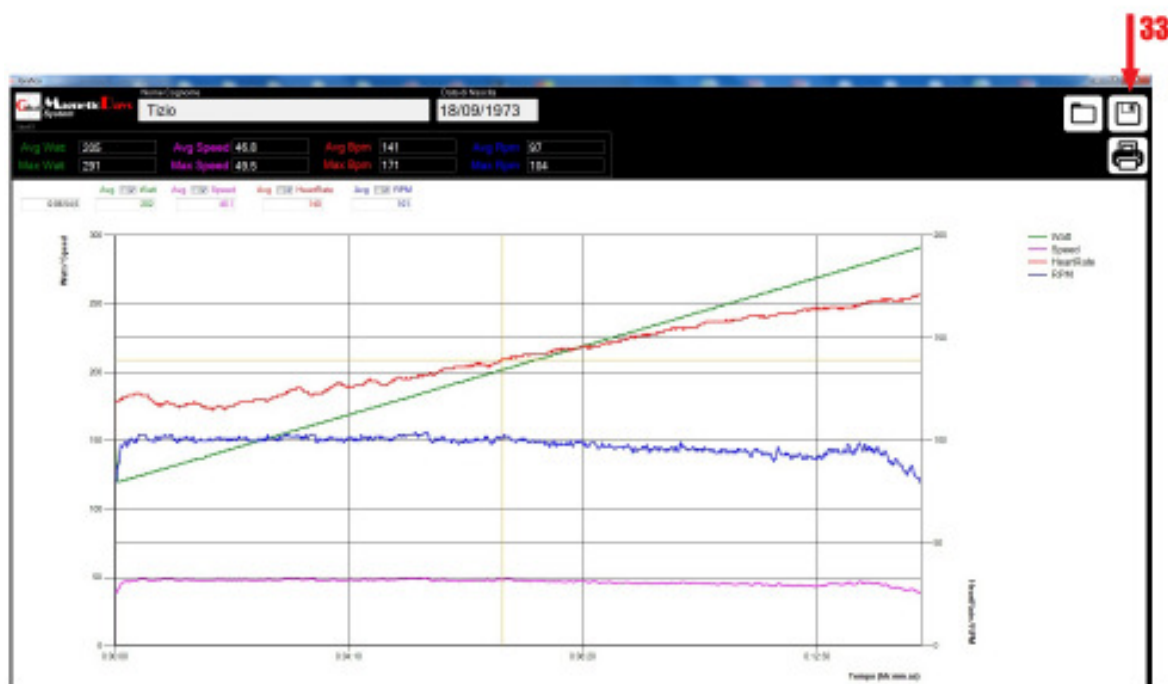
By pedalling the time stops flashing, the information generated in the NOW square appears while the STEP square scrolls the course of the Test Protocol, while the Time indicates in Count Down each individual Protocol step and the Watt value of the step in progress. The system will adjust AUTOMATICALLY to maintain the expected level of Watts, regardless of the ratio used (which will be a fixed ratio, PREFERABLY not lower than 15) and the maintained Pedalling frequency (RPM) (this is IMPORTANT data detected by the test because the Athlete expresses himself in his NATURAL condition for adaptation to stress). The test continues until the Athlete manages to maintain progressively incremental exertion. The moment you stop pedalling because you go no further, the test will stop automatically.

TEST

TEST BACK UP



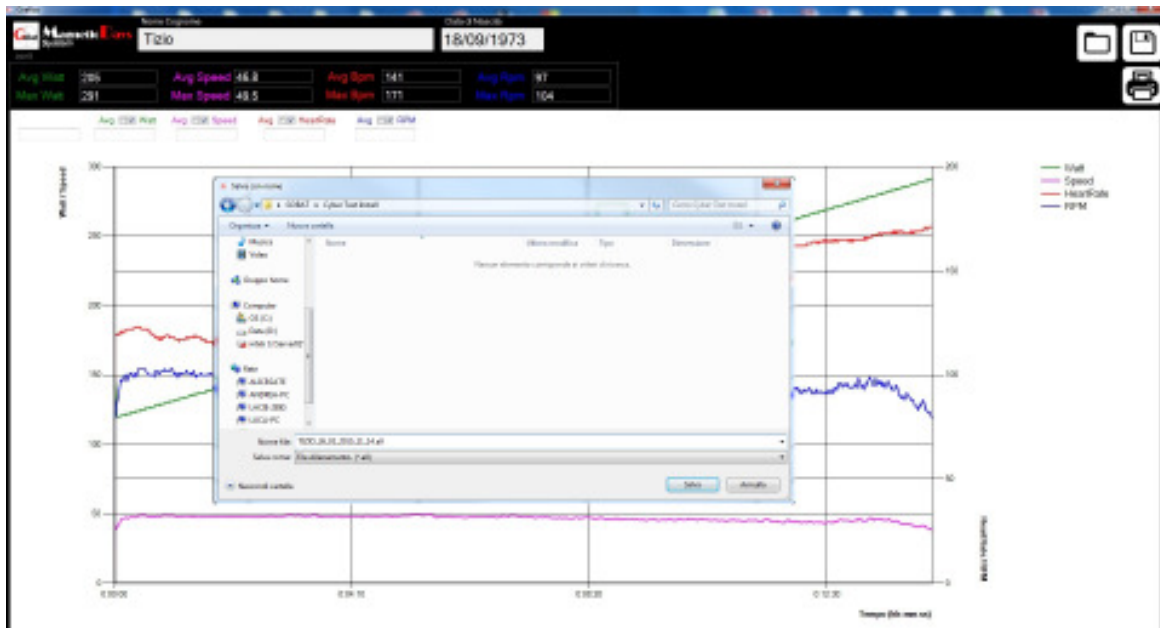
When the test is completed, it will be necessary to back up the generated Files.
Press the button 17 to access the GRAPHICS screen
which will generate TWO performed Test back up files.
One of the two files will be in the .CWS format and can be viewed both
with Excel and with all the major information analysis programmes, downloadable
via internet.
The second file will be in .ALL format and may be sent to the Coach
for analysis through the professional Cyber Test software.



On the Graphics screen, the entire test run will be display with 4 coloured curves.
The GREEN line represents the expressed Power pace (WATT)
The RED line shows the Heart Rate pace (BPM)
The BLUE line depicts the Pedalling frequency pace (RPM)
The PINK line shows the Speed

In the Name Field, the name of the Athlete may be entered,
also in the Set Up 3 - Personal details Screen.
If these fields have not been filled in, the NAME field will be in WHITE.

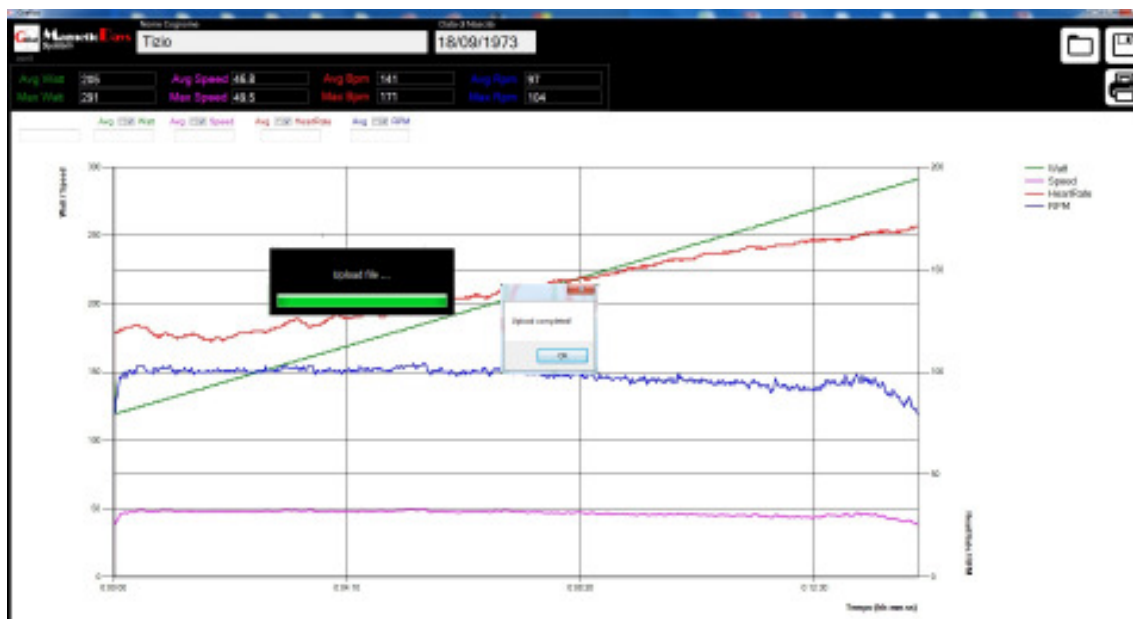
Press the button 33 to proceed to the actual file BACK UP in the two indicated versions.



This opens the Windows where you can save the two files in the desired folder. The name of the file will show:

If the NAME field of the previous screen is filled in with the Athlete name from the Set Up Personal details - Athlete Name / Date / Time. The file can still be renamed. Both files have the same name but a different format.

If the NAME field of the previous screen is NOT filled in with the Athlete name from the Set Up Personal details – Date/Time. The File can be renamed, possibly putting the Athlete's Name, not already saved automatically. Both files have the same name but a different format.



Once you press the SAVE key on the Windows screen, if the ID and password information on the screen Set Up 3 - Personal details are present, the UPLOAD file .ALL to the Training System Cloud will occur automatically

If the NAME field of the previous screen is filled in with the Athlete's name from the Personal details Set Up - Athlete Name / Date / Time.

The file can still be renamed. Both files have the same name but a different format.

If the NAME field of the previous screen is NOT filled in with the Athlete's name from the Personal details Set Up - Date / Time.

The file can still be renamed, possibly putting the Athlete's Name, not already saved automatically. Both files have the same name but a different format.

FUNCTIONS FOR USE 4 TRAINING



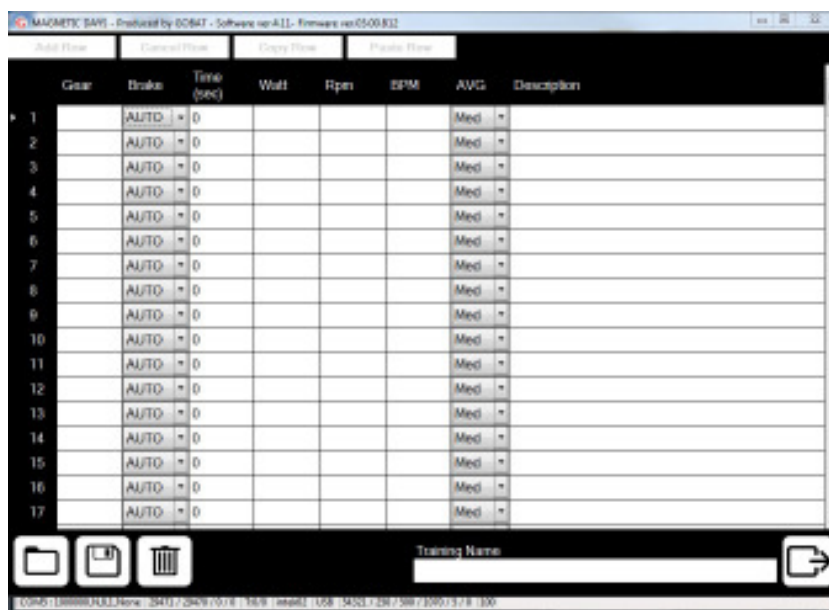
The other major innovation of Magnetic Days, is the ability to run Custom Training automatically managed by the system. The training protocols can be written directly by the Athlete or received from your coach who generated them with the Cyber Test professional software. The protocols can be received via USB, via E-mail or downloaded through the Training System Cloud on the www.magneticdays.com portal

The first step, on the software main screen, press the Test key (18) to enter Training in the area where we

- CREATE Training programmes
- SAVE Training programmes
- MODIFY Training programmes
- LOAD Training programmes saved on my computer
- RECEIVE Training programmes written by others

TRAINING

CREATING A TRAINING PROGRAMME



The Creating training programmes screen, allows you to freely enter our programmes consisting of various STEPS.

Based on the philosophy of use, for each single step there are COMPULSORY and OPTIONAL fields.

Speaking of Training management philosophy, we can choose whether to work in Manual or in Automatic.

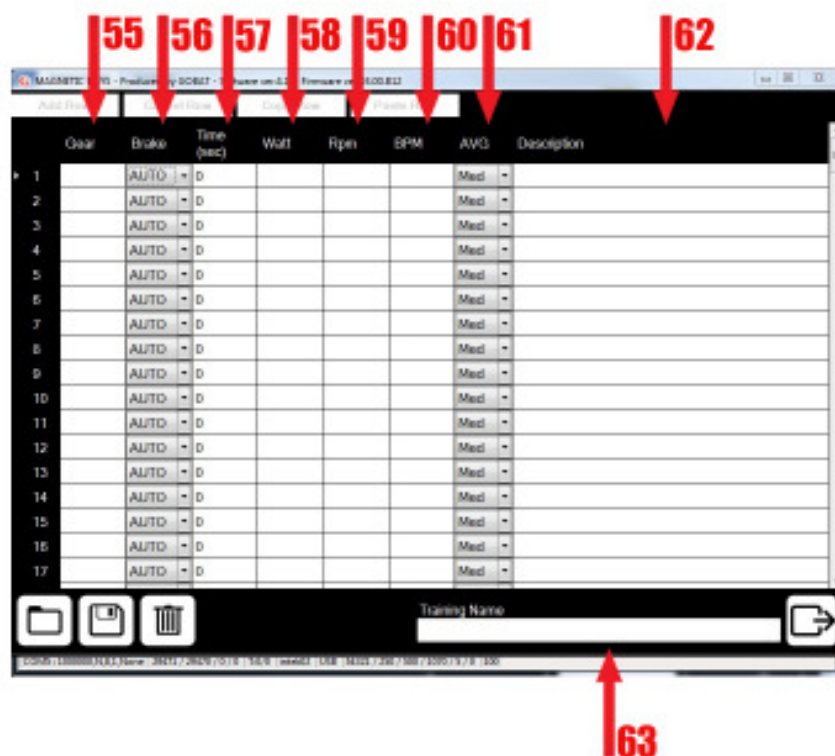
Working in Manual, the work done in terms of generated power will naturally depend on the ratio used, the selected level of Fixed Brake and the pedalling frequency (RPM)

When working in Automatic it will be the system that ensures (within a range of possibilities) the Power requirements, regardless of the ratio used and the pedalling frequency (RPM).

TRAINING

CREATING A TRAINING PROGRAMME

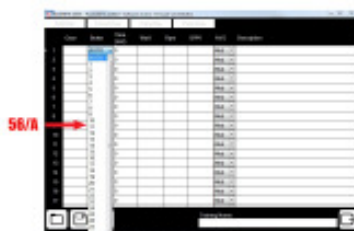
MANUAL FUNCTION



We are now creating a Training Step in Manual function.

The ratio being used is important, it is advisable to enter the ratio of the Gear (Gear - 55) indicated in the first line of the field to obtain the required Watt / RPM combination. To facilitate this choice, you can use the Magnetic Days CALCULATOR that gives the Wattage Values for each level of the MD brake used according to the ratio and the required RPM. The Gear field is alphanumerical and is still OPTIONAL

In the second field (Brake - 56) we put the Magnetic Days Fixed brake, chosen for the Step. The field works as a drop-down menu. Clicking on the field opens the menu from which you select the chosen Brake. The default is "AUTO" and should, in this case, be changed. The field is COMPULSORY.



In the third field (Time - 57) you must enter the Step duration time. The value is expressed in SECONDS. The field is COMPULSORY.

In the fourth field (Watt - 58) you must enter the amount of power required for the Step. We recommend that the field is filled in but, in this case, it is NOT COMPULSORY.

In the fifth field (RPM - 59) you must enter the pedalling Frequency value required by the Step. The field is alphanumeric and may show precise indications of RPM or alphabetic notes like "FREE" type. We recommend that the field is filled in but it is Optional.

In the sixth field (BPM - 60) you must enter the Heart Rate value suggested for the work required in the Step. The Field is Optional.

In the seventh field (AVG - 61) you must enter the FILTER value of the generated information. The filter values are:

0 – No filter. I information displays the pure value read every 0,5 sec.

MIN - I information displays the average value every 2 readings(1 sec.)

MED - I information displays the average value every 4 readings (2 sec.)

MAX - I information displays the average value every 8 readings (4 sec.)

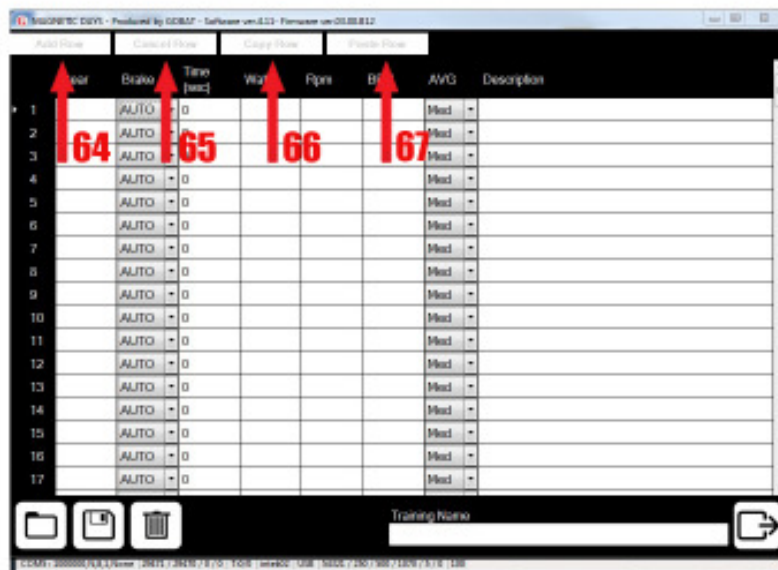
The set default value is MED.



In the eighth field (Description - 62) you can display a description that the training step calls for. The field is Optional .

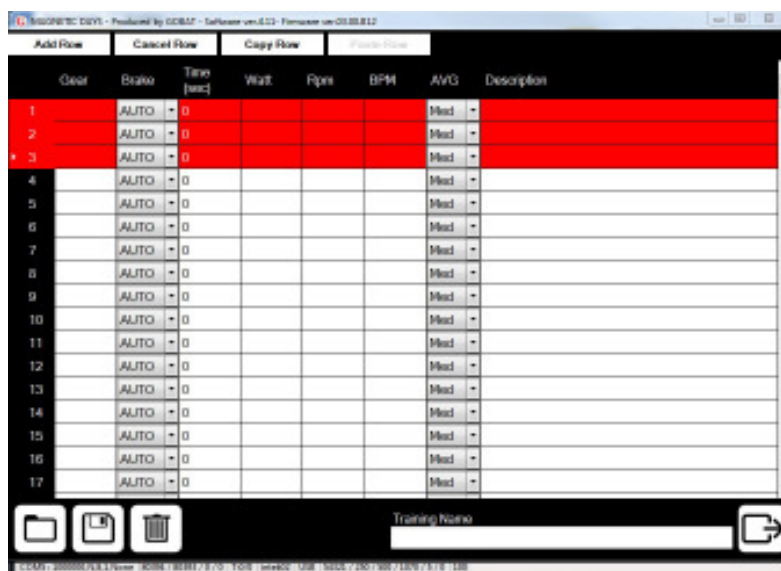
After writing the first line you will move to the next using the same guideline.

This chapter describes the creation of a training programme in the Manual Function. The programmes, however, can be MIXED with both Manual function and Automatic Function rows. For the creation of Automatic function rows, follow the indications in the Next Chapter (14.02.03).

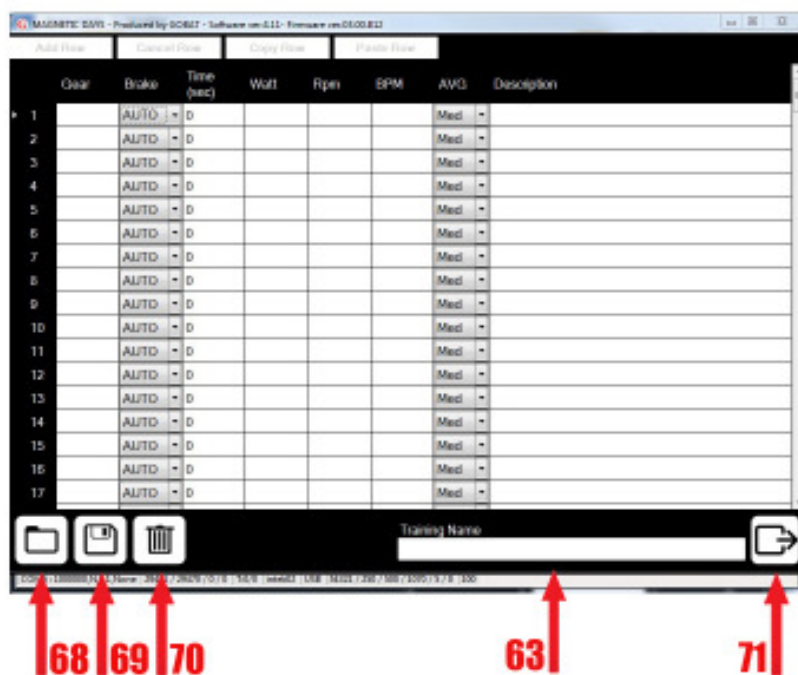


	Gear	Brake	Time (sec)	Wait	Rpm	BPM	AVG	Description
1	AUTO	0					Med	
2	AUTO	0					Med	
3	AUTO	0					Med	
4	AUTO	0					Med	
5	AUTO	0					Med	
6	AUTO	0					Med	
7	AUTO	0					Med	
8	AUTO	0					Med	
9	AUTO	0					Med	
10	AUTO	0					Med	
11	AUTO	0					Med	
12	AUTO	0					Med	
13	AUTO	0					Med	
14	AUTO	0					Med	
15	AUTO	0					Med	
16	AUTO	0					Med	
17	AUTO	0					Med	

If you have to create or modify Training programmes with many lines, you can use the keys indicated by the Add (64), Delete (65), Copy (66) and Paste (67) for existing rows. For this function, select the single or multiple rows that are highlighted in RED (See Figure below) and select the desired function with the relative key .



	Gear	Brake	Time (sec)	Wait	Rpm	BPM	AVG	Description
1	AUTO	0					Med	
2	AUTO	0					Med	
3	AUTO	0					Med	
4	AUTO	0					Med	
5	AUTO	0					Med	
6	AUTO	0					Med	
7	AUTO	0					Med	
8	AUTO	0					Med	
9	AUTO	0					Med	
10	AUTO	0					Med	
11	AUTO	0					Med	
12	AUTO	0					Med	
13	AUTO	0					Med	
14	AUTO	0					Med	
15	AUTO	0					Med	
16	AUTO	0					Med	
17	AUTO	0					Med	



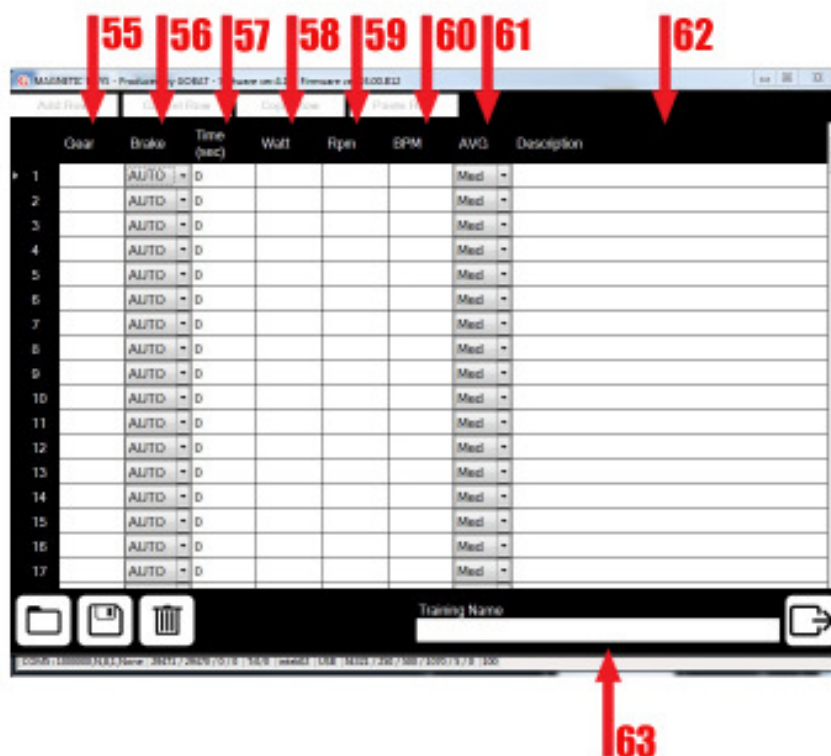
When you finish writing the Training programme, you must enter its' name, filling in the Training Name (63) field. The programme will be LOADED for use with the key 71 (See Chapter 14.04.01).

The Training programme may be SAVED key 68) (see Chapter 3.14.01) or DELETED, by pressing 70 (Before the final cancellation, a confirmation Alarm message will appear (See Chapter 15.01.01).

TRAINING

CREATING A TRAINING PROGRAMME

AUTOMATIC FUNCTION



We are now creating a Training Step in Automatic function.

In this case the System is automatically managed by the software for GUARANTEEING (within a certain range) the constant Power (Watt) generation irrespective of the Ratio used and the maintained Pedalling Frequency (RPM).

The first field (Gear - 55) be left in White, because the indicate data is not influential.

In the second field (Brake - 56) leave the AUTO menu default.

In the third field (Time - 57) you must enter the Step duration time. The value is always expressed in SECONDS. The field is COMPULSORY.

In the fourth field (Watt - 58) you must enter the required amount of power for the Step. In this case, the value becomes decisive as it is the reference parameter of the training step. The field becomes COMPULSORY. If no entry is made an alarm message is generated. (See Chapter 15.01.01).

In the fifth field (RPM - 59) you must enter the Pedalling Frequency value required for the Step. The field is alphanumeric and may show precise RPM or alphabetic indications such as "FREE". It is recommended that the field is filled in but it is Optional.

In the sixth field (BPM - 60) you must enter the Heart Rate value for the work required in this Step. This field is Optional.

In the seventh field (AVG - 61) you must enter the value of the generated information FILTER. The filtering values are possible:

- 0 – No filter. I information displays the pure value read every 0,5 sec.
- MIN - I information displays the average value every 2 readings(1 sec.)
- MED - I information displays the average value every 4 readings (2 sec.)
- MAX - I information displays the average value every 8 readings (4 sec.)

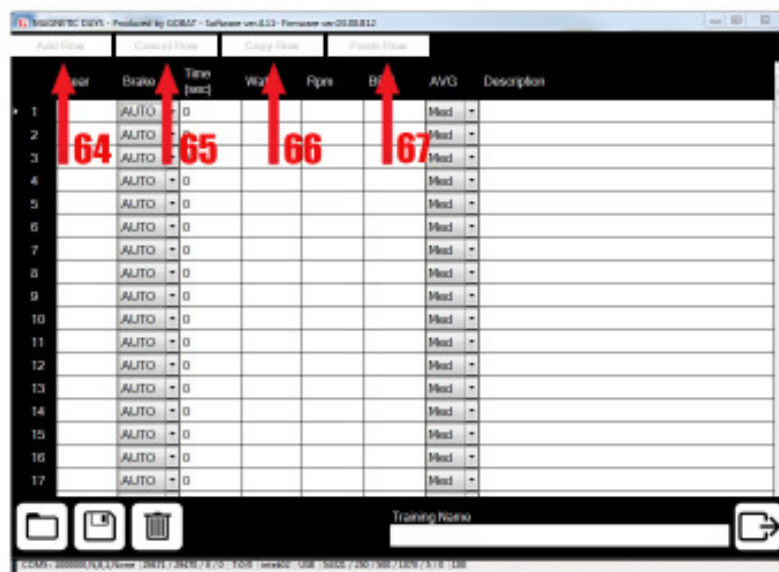
The set default value is MED.



In the eighth field (Description - 62) you can show a training step job description. The field is Optional.

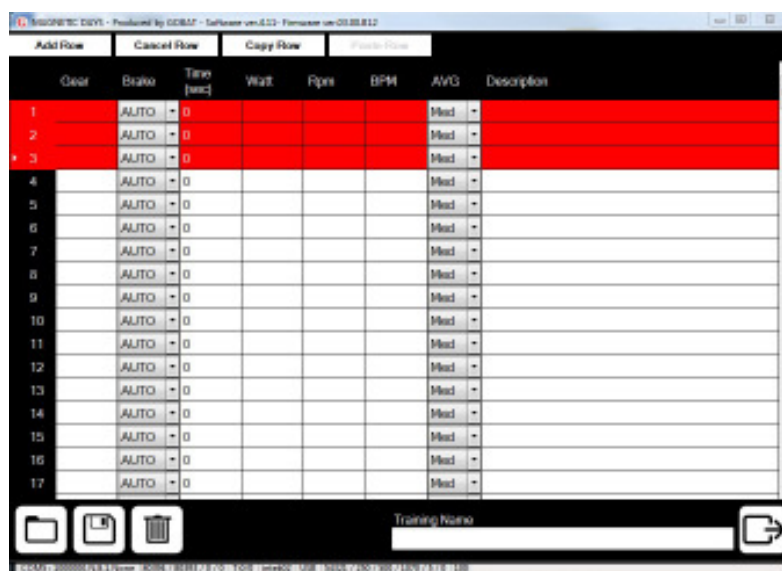
After writing the first line you will move to the next using the same guidelines.

This chapter describes the writing of an Automatic function training programme.
The programmes, however, can be MIXED providing both Manual and Automatic rows.
In this case, for the creation of the Manual Function rows follow the instructions in the Previous Chapter (14.02.02).

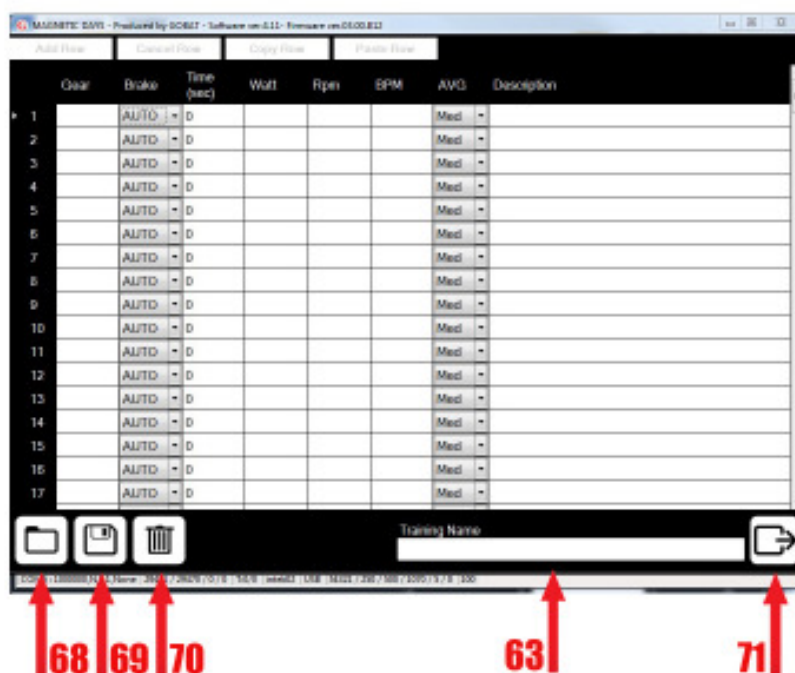


	Gear	Brake	Time (sec)	Wait	Rpm	BPM	AVG	Description
1	AUTO	0					Med	
2	AUTO	0					Med	
3	AUTO	0					Med	
4	AUTO	0					Med	
5	AUTO	0					Med	
6	AUTO	0					Med	
7	AUTO	0					Med	
8	AUTO	0					Med	
9	AUTO	0					Med	
10	AUTO	0					Med	
11	AUTO	0					Med	
12	AUTO	0					Med	
13	AUTO	0					Med	
14	AUTO	0					Med	
15	AUTO	0					Med	
16	AUTO	0					Med	
17	AUTO	0					Med	

Having to create or modify Training programmes with many lines, you can use the keys Add (64), Delete (65), Copy (66) and Paste (67) for the existing rows. For this function, select the single or multiple rows that are highlighted in RED (See Figure below) and select the desired function with the relative key.

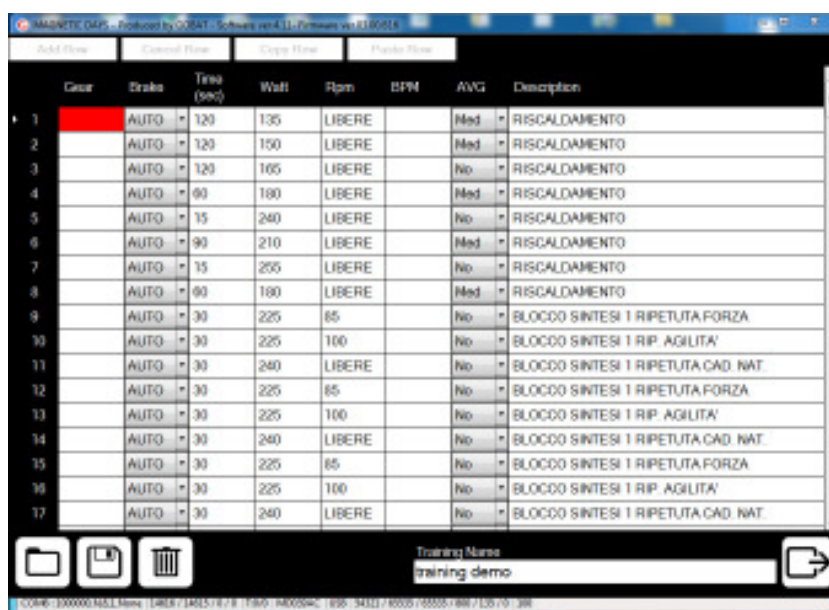


	Gear	Brake	Time (sec)	Wait	Rpm	BPM	AVG	Description
1	AUTO	0					Med	
2	AUTO	0					Med	
3	AUTO	0					Med	
4	AUTO	0					Med	
5	AUTO	0					Med	
6	AUTO	0					Med	
7	AUTO	0					Med	
8	AUTO	0					Med	
9	AUTO	0					Med	
10	AUTO	0					Med	
11	AUTO	0					Med	
12	AUTO	0					Med	
13	AUTO	0					Med	
14	AUTO	0					Med	
15	AUTO	0					Med	
16	AUTO	0					Med	
17	AUTO	0					Med	



When you finish writing the Training programme, you must enter its' name, filling in the Training Name field (63). The programme will be LOADED for execution with the key 71 (see Chapter 4.14.01).

The training programme can be SAVED (key 68) (see Chapter 3.14.01) or entirely DELETED, by pressing 70 (Before the final cancellation, a confirmation Alarm message will appear (See Chapter 15.01.01)).



The screenshot shows the MAGNETIC DAYS software interface with a table containing 17 rows of data. The columns are: Gear, Brake, Time (sec), Watt, Rpm, BPM, AVG, and Description. The data is as follows:

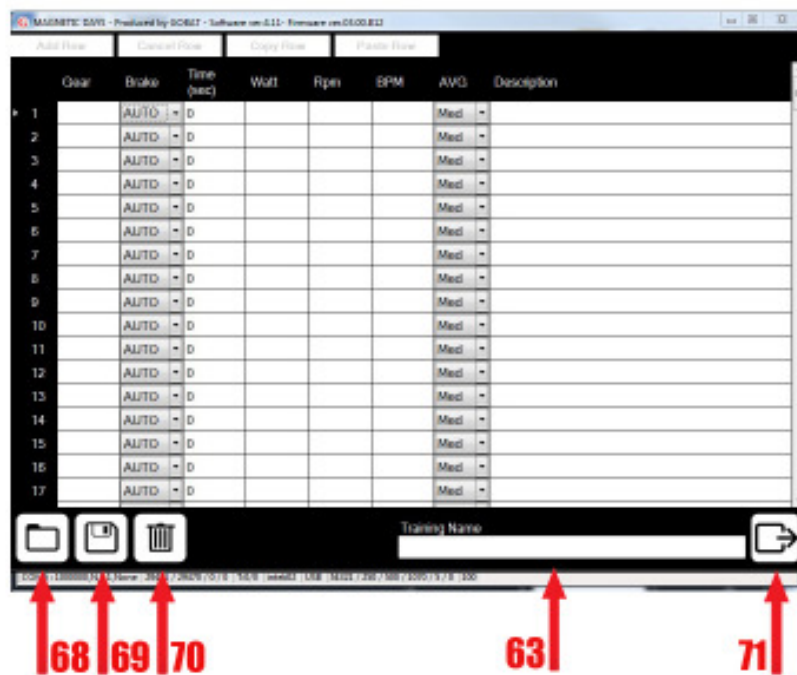
Gear	Brake	Time (sec)	Watt	Rpm	BPM	AVG	Description
1	AUTO	120	135	LIBERE		Med	RISCALDAMENTO
2	AUTO	120	150	LIBERE		Med	RISCALDAMENTO
3	AUTO	120	165	LIBERE		No	RISCALDAMENTO
4	AUTO	60	180	LIBERE		Med	RISCALDAMENTO
5	AUTO	15	240	LIBERE		No	RISCALDAMENTO
6	AUTO	90	210	LIBERE		Med	RISCALDAMENTO
7	AUTO	15	255	LIBERE		No	RISCALDAMENTO
8	AUTO	60	180	LIBERE		Med	RISCALDAMENTO
9	AUTO	30	225	85		No	BLOCCO SINTESI 1 RIPETUTA FORZA
10	AUTO	30	225	100		No	BLOCCO SINTESI 1 RIP. AGILITA'
11	AUTO	30	240	LIBERE		No	BLOCCO SINTESI 1 RIPETUTA CAD. NAT.
12	AUTO	30	225	85		No	BLOCCO SINTESI 1 RIPETUTA FORZA
13	AUTO	30	225	100		No	BLOCCO SINTESI 1 RIP. AGILITA'
14	AUTO	30	240	LIBERE		No	BLOCCO SINTESI 1 RIPETUTA CAD. NAT.
15	AUTO	30	225	85		No	BLOCCO SINTESI 1 RIPETUTA FORZA
16	AUTO	30	225	100		No	BLOCCO SINTESI 1 RIP. AGILITA'
17	AUTO	30	240	LIBERE		No	BLOCCO SINTESI 1 RIPETUTA CAD. NAT.

Below the table, there are four icons: a folder (Save), a trash can (Delete), a document (Load), and a right-pointing arrow (Next). Below these icons are the numbers 68, 69, 70, 63, and 71, which correspond to the function keys for saving, deleting, loading, and executing the training program. A 'Training Name' field is also visible at the bottom right, containing the text 'training demo'.

The image shows an example of a compiled Automatic Training programme.

TRAINING

TRAINING PROGRAMME BACK UP

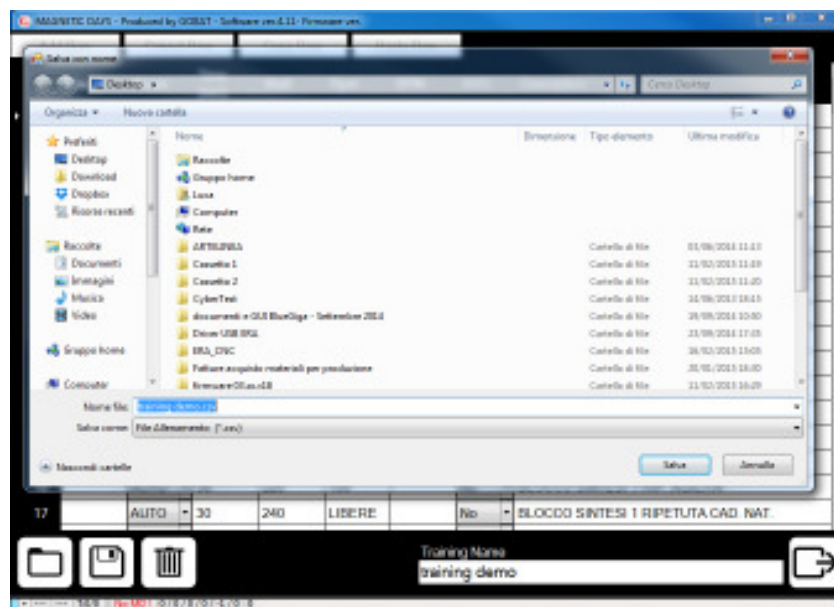


Once the creating of a new or amendment of an existing Training programme is terminated, you proceed to Storage.

The button 69 leads to a Windows dialog where you can permanently save the Training programme into the desired folder on your PC.

The Windows dialog will automatically show in "File name" the title of the previously entered training programme in the Training Name field (63).

The file will be saved in .CSW format.



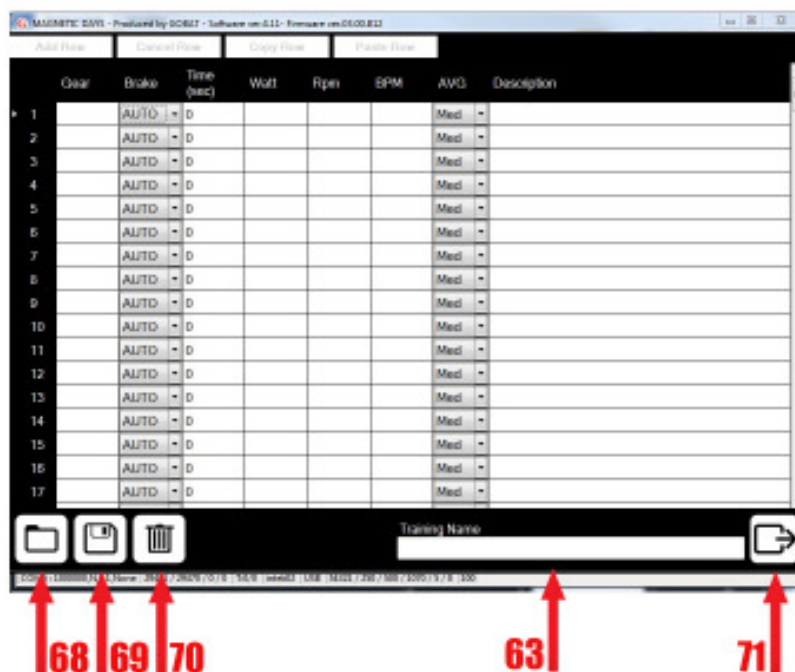
After running the Back up, if the ID (91) and Password (92) fields are completed in personal details Set Up (15 / A),



The message requesting Upload of information in your System Training Cloud page appears for the www.magneticdays.com portal.

TRAINING

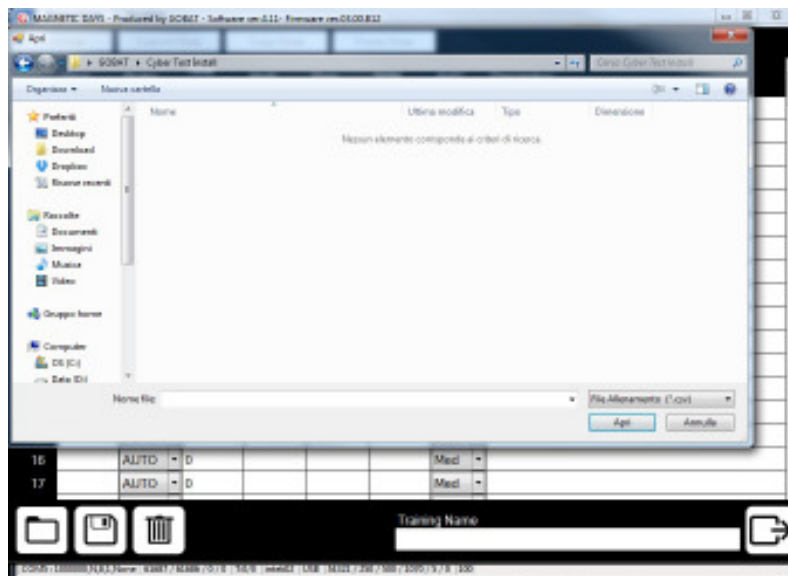
LOADING A TRAINING PROGRAMME



To Load a created Training programme to Edit or Run it, you can proceed in two ways. Either extracting it from a folder on your PC or withdrawing it in synchronization from your page Training System Cloud on the www.magneticdays.com portal.

The function is determined by the presence or not of the correct information of ID and PASSWORD in the Personal details Set Up page (Fields ID / Password and 91/92).



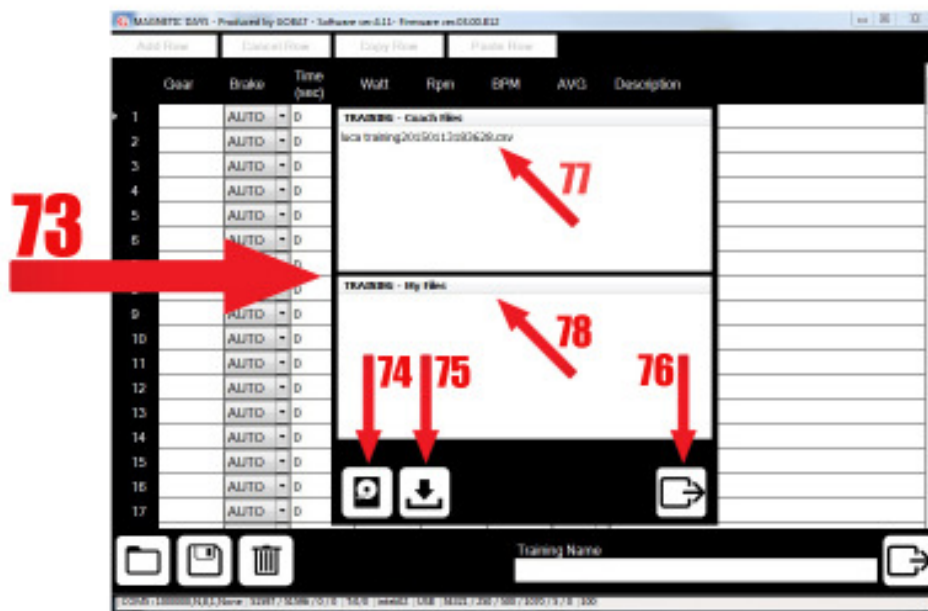


If these are NOT present or do NOT MATCH with the registration information on the portal, press the Upload (68) that opens a Windows dialogue to select the desired Training programme files. Press “Open” in the Windows dialogue and the file will be Uploaded automatically.



Case	Drain	Time (sec)	Watt	Rpm	BPM	AVG	Description
1	AUTO	120	135	LIBERE		Med	RISCALDAMENTO
2	AUTO	120	150	LIBERE		Med	RISCALDAMENTO
3	AUTO	120	165	LIBERE		No	RISCALDAMENTO
4	AUTO	60	180	LIBERE		Med	RISCALDAMENTO
5	AUTO	15	240	LIBERE		No	RISCALDAMENTO
6	AUTO	90	210	LIBERE		Med	RISCALDAMENTO
7	AUTO	15	255	LIBERE		No	RISCALDAMENTO
8	AUTO	60	180	LIBERE		Med	RISCALDAMENTO
9	AUTO	30	225	85		No	BLOCCO SINTESI 1 RIPETUTA FORZA
10	AUTO	30	225	100		No	BLOCCO SINTESI 1 RIP. AGILITA'
11	AUTO	30	240	LIBERE		No	BLOCCO SINTESI 1 RIPETUTA CAD. NAT.
12	AUTO	30	225	85		No	BLOCCO SINTESI 1 RIPETUTA FORZA
13	AUTO	30	225	100		No	BLOCCO SINTESI 1 RIP. AGILITA'
14	AUTO	30	240	LIBERE		No	BLOCCO SINTESI 1 RIPETUTA CAD. NAT.
15	AUTO	30	225	85		No	BLOCCO SINTESI 1 RIPETUTA FORZA
16	AUTO	30	225	100		No	BLOCCO SINTESI 1 RIP. AGILITA'
17	AUTO	30	240	LIBERE		No	BLOCCO SINTESI 1 RIPETUTA CAD. NAT.

If the ID and Password information MATCH, press the Upload (68) to access the synchronization screen (73) with its own Training System Cloud page on the portal.



The quadrant at the top of the page will show the Training Programmes files that the Coach sent (77). The quadrant at the bottom of the page will show the saved Training Programmes files written by us. this function

It is extremely convenient to pass the Training Programmes from a Magnetic Day control device to another, avoiding the use of cables or connection software between devices.

Selecting the desired file gives you two options:

The first, by double clicking on the file, you can upload it directly in Training programme creating window.

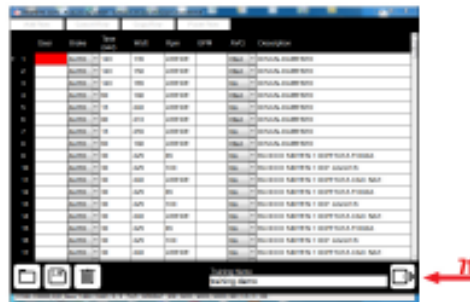
The second allows you to save the selected file in the PC memory, in the Gobat Training folder. To do this select the file and click on the key 75.

If the Training programme file we want to load is NOT present on the synchronization screen, but in the PC memory, we can access the selection with key 74 which sends us back to a Window screen. At this point the selection procedure is the same as described in the previous page.

Press the key 76 to exit the screen, going back to the Creating Training Programme screen.

TRAINING

EXECUTING A TRAINING PROGRAMME



Once you have selected the Training Programme on the input screen, press key 71 and ENTER it for EXECUTION.



We are now on the Magnetic Days Software Main Screen, with the Training Programme Uploaded (Field TRAINING - 18 - REVERSE) but still in standby.
This is evidenced by the Left (Now) information panel that still shows the numbers in YELLOW

We analyse the information shown on the screen:

Field 21 shows the TITLE of the loaded Training programme

In field 7 we have the COUNTER of the steps in the Training programme.
The number on the Right indicates the Total number of steps, while the Left indicates which Step is loaded for execution. The information of the loaded field appears in Box 2 (Step)

The individual fields that we read in the Step, from top to bottom indicate:

- TIME; the Step duration. This field works in countdown during the course of Training.
- The POWER in watts required by the Step in execution. If the Step is in AUTOMATIC the data represents the Step Master and the system will maintain it regardless of the ratio used and the maintained pedalling frequency (RPM).
- The PEDALLING FREQUENCY (RPM) required by the Step in execution. If the Step is in AUTOMATIC this will be the only data that the athlete must strive to maintain to conduct the proper execution of the Training Programme.
- The HEART RATE (BPM). Is an approximation of that which should be the Heart Rate corresponding to the Step in execution. If shown it is a data reference for the athlete to check his physical condition at the time of the execution of the Training Programme.
- The GEAR. If the Step is in MANUAL, the field will show the correct Ratio (Gear) to use to keep to the Watts / RPM combination required in the Step in execution. This figure is easily obtainable using the Magnetic Days software CALCULATOR tool.

Using the same sequence described in Box 3 (Next Step) you can read the information required by NEXT Step and not the one in execution. The Square shows a further indication contained in field 24. This indication refers to the type of the Next Training Step. If the step is in AUTOMATIC, the field will display an "A". If the step is in MANUAL, in the field will show the expected Brake Number of the Step. In this case in the field Gear we will probably find the indication of the Ratio to use.

When the countdown of the Step in execution is finished, the information in the Next Step panel will move immediately to the Step Panel, while in the Next Step panel those required by the following Step will appear (Except when in the Step panel the last Step of the Training programme is loaded)

Field 20 displays the description of the Step in execution .

Field 22 displays the TOTAL DURATION of the loaded Training programme.
The field will remain fixed throughout the training.

Field 23 displays the REMAINING TIME of the Training programme.
Starting the execution of the programme, the field begins the Countdown. Likewise,
The Execution Time of the programme is shown in the TIME field of Box 1 (Now)

Pressing START (5) initiates the Uploaded Training programme.
The Uploaded programme will be FROZEN and is only activated when pedalling starts.
This condition is shown by:

- The Numbers in the Now Panel (1) from Yellow turn GREEN
- The TIME in the Now Panel, indicating the Total Time of the Training Programme Execution FLASHES
- The Start Field (5) has become the PAUSE symbol

This FREEZE condition will also occur DURING the execution of the Training programme, whenever this is interrupted by stopping pedalling. It automatically REACTIVATES by starting pedalling again.



STARTING pedalling, Effectively Activates the Training programme and this is highlighted by :

- The TIME in the Now Panel, indicating the Total Time of Training Programme Execution stops Flashing and starts counting the Total Training Time
- In the Start field (5) the START word appears again but now in GREY
- Field 23 starts the countdown indicating the Time Remaining until the end of the Training programme.



Whenever, for any reason, you stop pedalling, the Training programme freezes again, returning to the previous display.

During the Training programme execution, when the Step in execution is running AUTOMATIC, should the intensity of the step be too high, you can intervene on the Single Step by pressing button 14 (MINUS). The Power intensity (Watts) required by the Step decreases the value set in the System Set Up.



During the Training programme execution, the individual Steps can be SKIPPED or REPEATED.



To move Forwards and Backwards between the Training programme Steps, you must first suspend it by pressing STOP (9).

At this point, use the Forward Arrow (6) / Back Arrow (8) to scroll the Step. The selected number will appear in field 7. Once the Step is selected, Restart the Programme by pressing START (5).

To view the Step values, press the Training key (18) and view the entire Training programme on the Input screen, from which you can then return to the main screen with key 71.



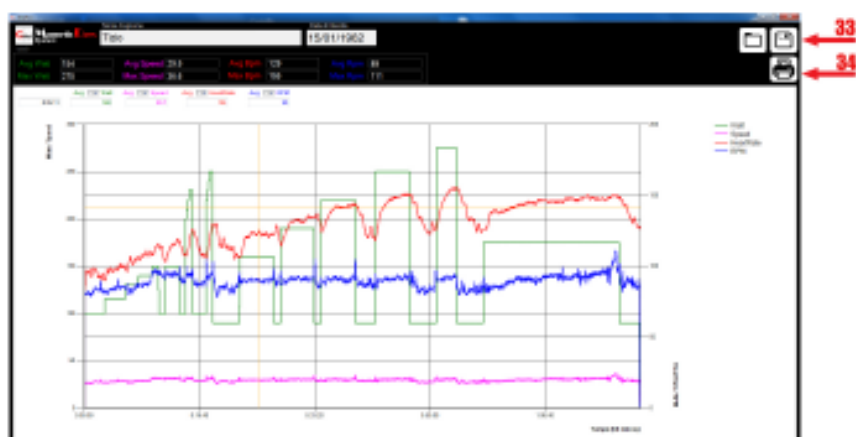
If you want to start over the training programme, after pressing the STOP key (9), you will have to press RESET (10) and then START again.

TRAINING

SAVING A COMPLETED TRAINING SESSION



Upon reaching the end of the execution of the training programme, you press the STOP key(9).
Then, by pressing GRAPHIC (17), you go to the graphical display of the finished Training Programme.



On this screen, all the Training session is displayed in graphical form. Specifically, the line

RED will show us the progress of the Heart Rate (BPM) during training

GREEN will show us the progress of power (watts) during training

BLUE will show us the progress of the pedalling frequency (RPM) during workout

PINK will indicate the progress of the theoretical speed during training

The lines may be pure (the case of the example) and they faithfully report the both the information generated, and averages. The selection is made by ticking the appropriate checkboxes. The curves of pure information and averages will naturally be displayed together.

In the fields on the black plate of the chart, we can see the MAX and MEDIUM value information of each parameter.

Press the key 34 so the entire graph can be printed.

Press the 33 key so the entire workout can be SAVED.

In this case Window will open, where we can choose where to save the workout.

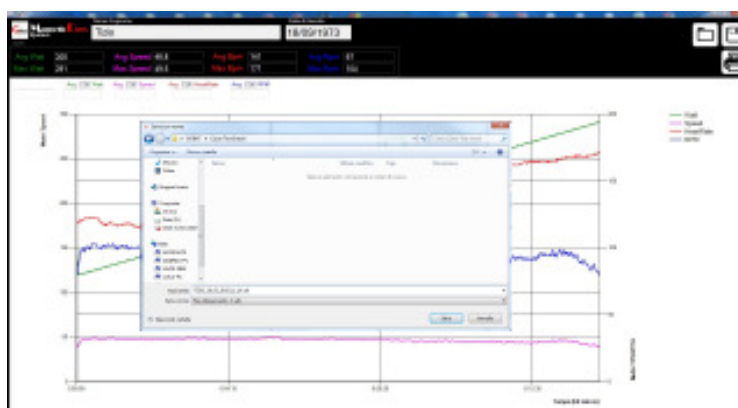
The backup will be done in TWO files. The first format .all will serve for a display and an analysis of the training through our programmes. The second file will be in .csw format and may be viewed with both Excel and with the main analysis softwares on the market (Training Peaks / Self Loops / Golden Cheetah), being the compatible writing protocol .

On the Windows dialog the name of the file will automatically appear and will be formed by

Athlete Name

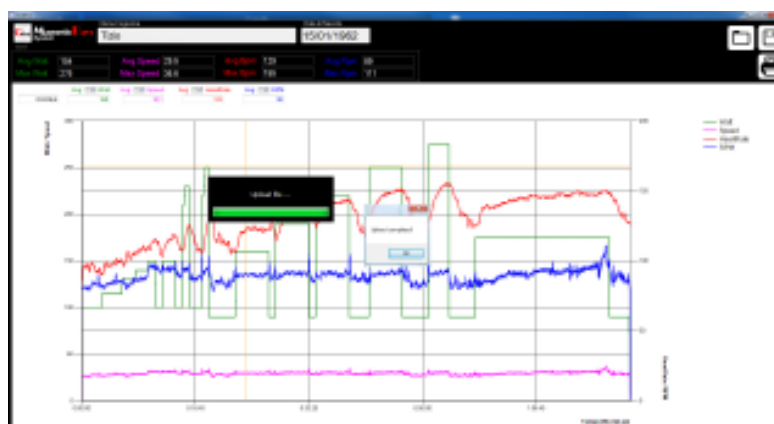
Training date

Training schedule



Once the backup is done, if the Username and Password in the fields of the Set Up Information screen are present in the registration information to the www.magneticdays.com portal, the system will ask if you want to automatically proceed to the loading of the training files on your portal page.

If yes (and there is an internet connection), the system will load the file automatically.

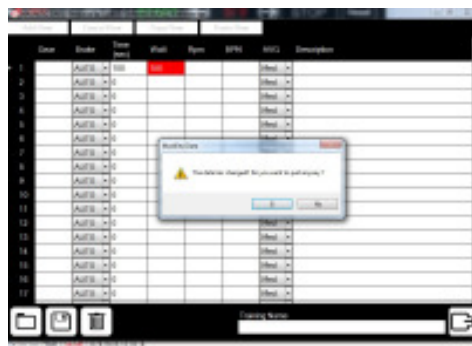


MESSAGGES

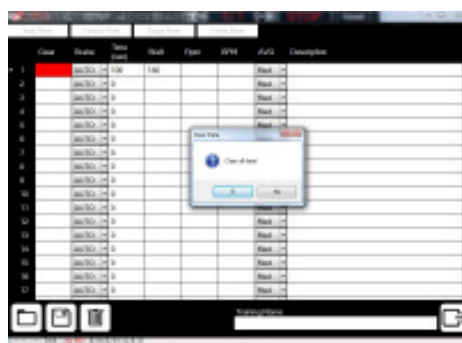
In this chapter we are going to see the different ERROR or WARNING messages the Magnetic Days software can send.



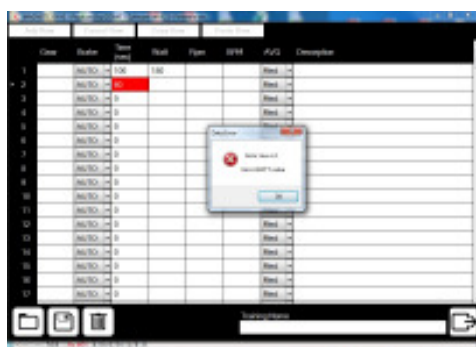
Running the software, you do not have connection with the Magnetic Days. This can be caused either by a power failure of the MD or an incorrect USB cable connection.



Exiting the creating of a training programme, having changed some data CONFIRM whether to proceed to back up is requested.



Wanting to DELETE a training programme the message asks CONFIRMATION to proceed.



The message appears when a line writing ERROR occurs on Training programme (Eg. the TIME has not been entered, that is COMPULSORY)



The message CONFIRM appears at the request of the Training programme RESET after it was stopped (STOP key).