UNITY

User Manual

TECHNOGYM®

The Wellness Company

Contents

Description of Unity - Artis Line

A - **Screen**: it allows you to view and control information, settings and contents both for workouts and for entertainment. The tablet-style touch screen interface allows you to include the contents offered by the Technogym App Store.

B - **TGS key input**. The device reads the training data from the TGS key and stores the results of the exercise performed.

C - **Headphone connector**: used to plug in headphones and listen to audio content; or also an earphone with microphone to make Skype calls.

D - **USB port**

E - **Sensor for NFC / RFID reader**

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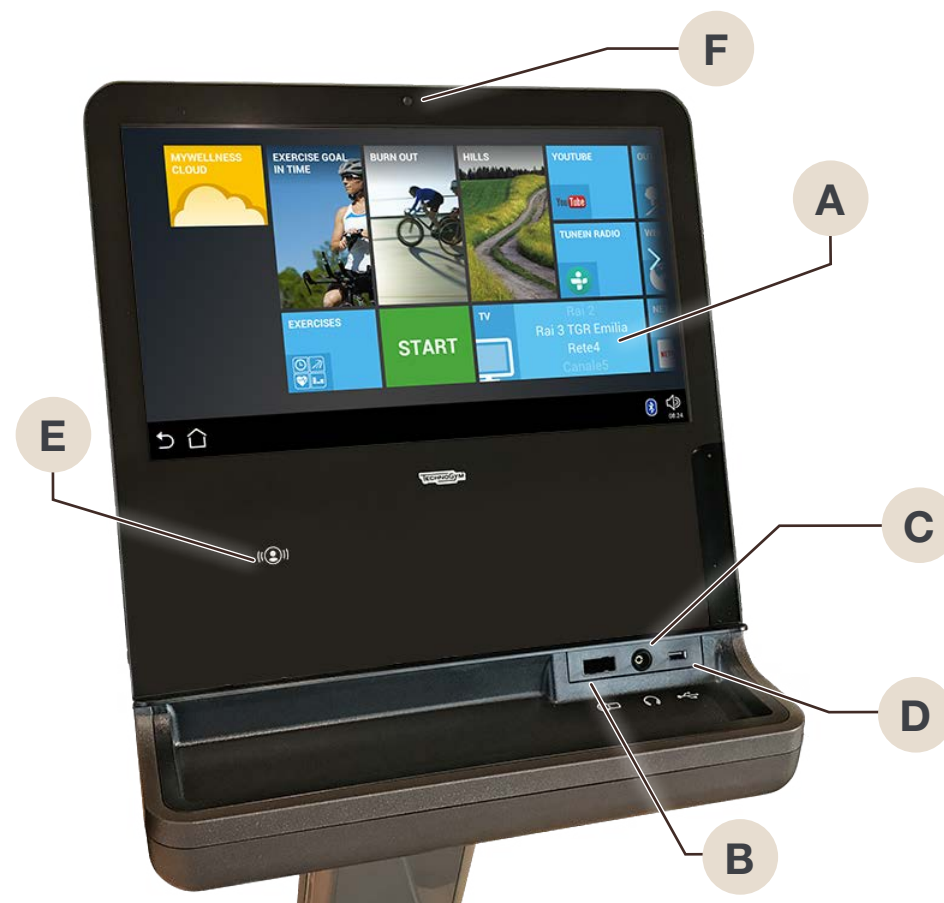
Description of Unity - Excite Line

A - **Screen**: it allows you to view and control information, settings and contents both for workouts and for entertainment. The tablet-style touch screen interface allows you to include the contents offered by the Technogym App Store.

B - **TGS key input**. The device reads the training data from the TGS key and stores the results of the exercise performed.

C - **Headphone connector**: used to plug in headphones and listen to audio content.

D - **USB port**

E - **Sensor for NFC / RFID reader**

Integration of Unity with RFID and Bluetooth

How to use the RFID reader

Before starting your exercise, rest your personal device on the equipment, ensuring that your device's sensor lines up with the logo of the reader. Your personal device will then connect to the Technogym cloud and display the training program and a video showing you how to perform the exercise correctly.
At the end of the exercise the results are saved in the Technogym cloud.

The RFID reader is optional for all products in the Excite line.

How to use Bluetooth

Bluetooth functionality makes it possible to:

- manage the audio contents of your Apple or Android device directly with Unity;

- connect Bluetooth headphones with Unity;

- connect the Bluetooth heart belt with Unity.

Manage the audio contents

Activate the Bluetooth connection on your device (for example, on your smartphone).
Activate the Bluetooth connection in Unity.
Select the device you want to connect: smartphone.
A list of devices will appear; select your device.
Confirm the match in your device.

For Android devices, you must have first installed the relative Technogym application in your personal device.

Activate the Bluetooth connection in Unity.

1

12:30

Select the device you want to connect: smartphone, headphones or heart belt.

2

Connect the Bluetooth headphones

Activate the Bluetooth connection in the headphones and activate the pairing mode.
Activate the Bluetooth connection in Unity.
Select the device you want to connect: headphones.
A list of devices will appear; select your device.

Connect the Bluetooth heart belt

Activate the Bluetooth connection in Unity.
Select the device you want to connect: Heart belt.
A list of devices will appear; select your device.

Status bar

The contents and controls vary according to the equipment on which it is installed.

The status bar is the only element that is always shown.

Touch the BACK symbol to go back 1 level, to the previous page.

Touch the AUDIO symbol to control the audio volume.

The time is in read only mode.

Touch the HOME symbol to go to the home page.
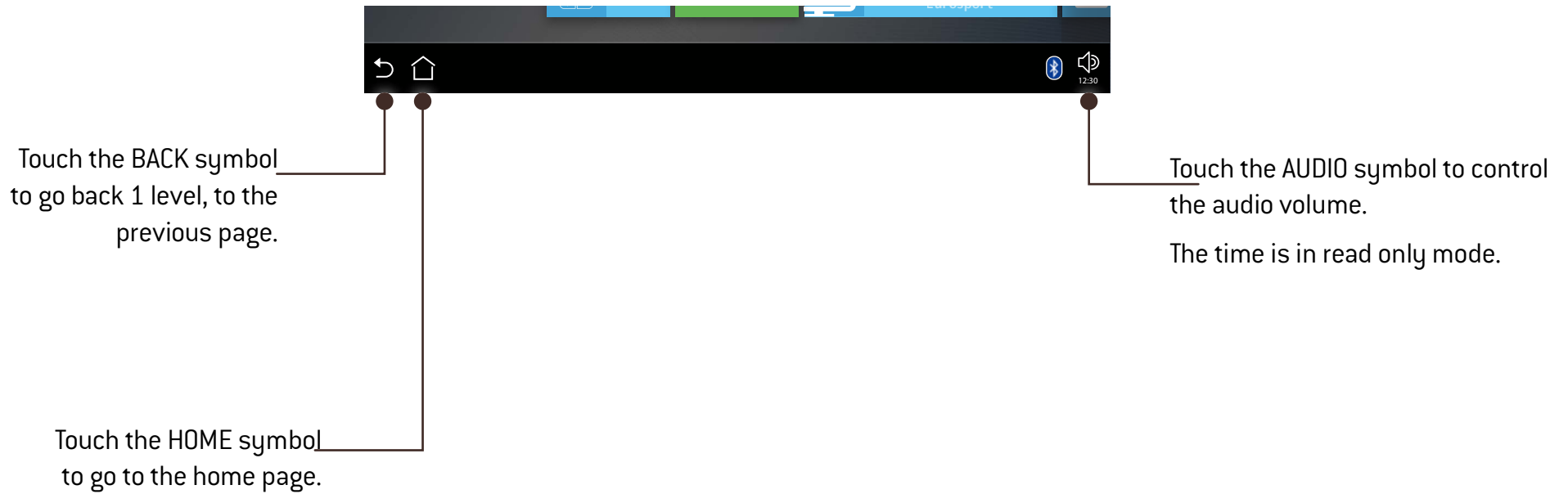
Home Page

The characteristics of the product and the initial page may differ according to the version, the amount of personalised settings and the applications used.

The screen may appear as totally blank, with a flashing LED (in the Artis Line); or with a screensaver.
Touch the screen at any point to switch it on.

To personalise the screensaver connect to the Technogym website, using the credentials supplied when purchasing Unity.
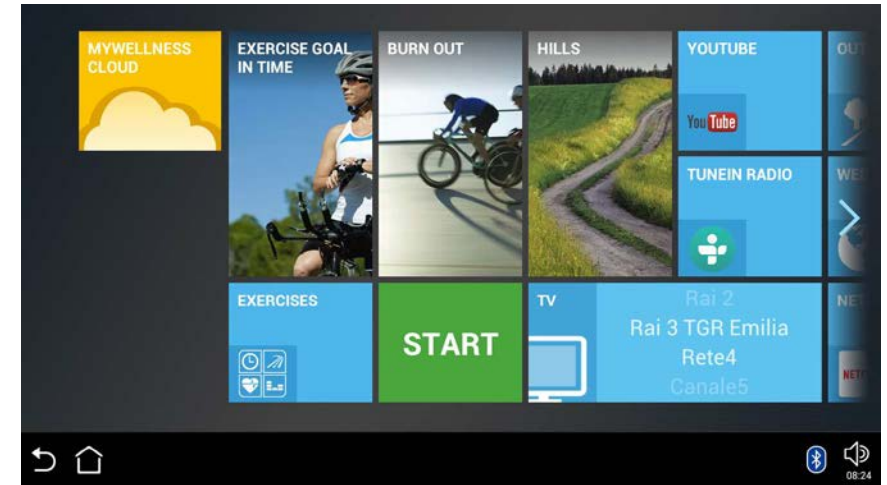
Exercises

Touch the blue box **EXERCISES**.

For a quicker search, all the exercises are divided into categories.

To start one of the exercises or the test:

- touch the name of the category; a list of exercises or tests will appear on the right

- touch the name of the exercise or test; a brief description of the exercise or test will appear

- touch the scroll symbol on the right.

The following is the list of categories and the exercises included in each of them.

The number of exercises, categories and tests may vary depending on the line (Artis or Excite) and product.

Goal driven exercises

These are exercises which start quickly because the only parameter that requires setting is the goal value.

- time

- distance

- calories

Heart rate driven exercises

These are exercises performed at a constant heart rate and therefore the heart rate monitor must be used:

- CPR, constant pulse rate

- Training zone

- Weight loss
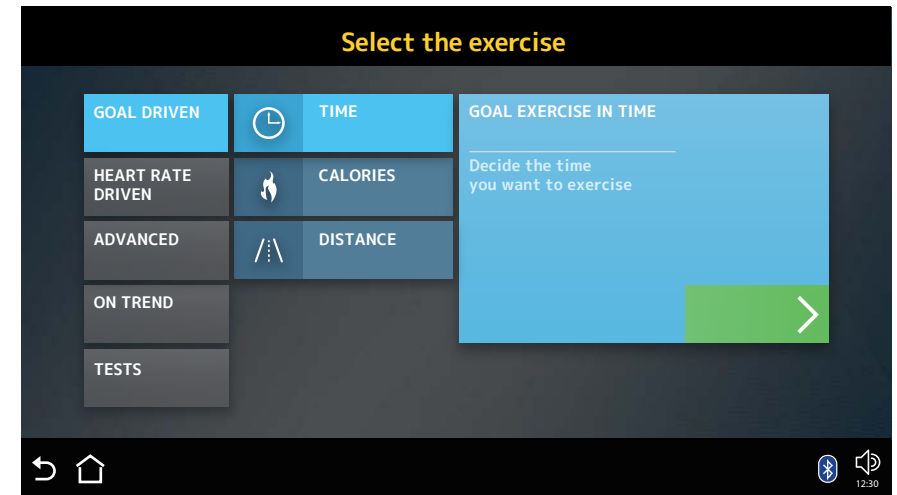
On trend

- Hi-low blocks

- Hills

- Cross training

- Burn out, exercise specific for Bike and Recline

- Speed shift, exercise specific for Run

Exercises

Advanced exercises

These are exercises in various steps, with preset load variations or variations set by the user:

- Preset profiles

- Create your own

Tests

Depending on the type of equipment, there are three test categories available:

- Maximal tests

- Submaximal tests

- Military tests

You may be asked to enter data before starting the exercises and the test.
Age and weight data are not generally needed to start an exercise, they are optional. Entering your age and weight is useful for some calculations; for example:

- if your weight is entered, the calculation of calories burned will be more precise;

- if your age is entered, calculation of your max heart rate will be more precise.

If no user data is entered, the calculations are based on a use who is 30 years old and weighs 70 kg.

Data displayed during the exercise

During the exercise, data related to the exercise will be displayed at the centre of the screen. The following data is shown for all products:

- time elapsed, expressed in minutes and seconds;

- calories burned, expressed in kilocalories;

- distance covered, expressed in kilometres;

- heart rate, if detected, expressed in beats per minute.

In Bike, Top and Recline the following data is also shown:

- power, expressed in watts;

- speed, expressed in rpm, that is "revolutions per minute";

- effort level.

In Synchro, Step, Vario and Climb the following data is also shown:

- power, expressed in watts;

- speed, expressed in spm, that is "strides per minute";

- effort level.

In Run and Jog the following data is also shown:

- gradient, expressed as a percentage;

- speed, expressed in km/h;

- pace, expressed in min/km
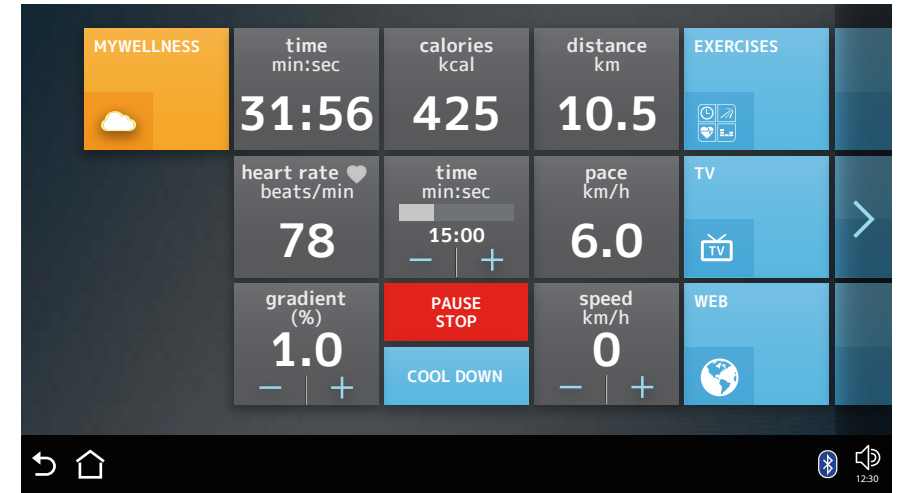
In the Excite Step and in the Climb the distance is expressed in floors.

The theoretical max heart rate (HR) is calculated with the formula 220-age, therefore we recommend inserting the age when setting an exercise, even though it is not compulsory, for a correct heart rate display.

⚠️ **WARNING**
Always check that your heart rate never goes above 90% of your maximum rate.

Keys that are active during the exercise

Pause / Stop key

To interrupt the exercise for a quick pause. During pauses, all values remain where they were; press **RESTART** to continue, or **STOP** to finish. A message informs you of the maximum pause time, after which the exercise stops, displaying the results achieved up to the interruption.

Stop key

To end the exercise without a cool down.
The **Stop** key to finish the exercise is present while the exercise is paused.

Cool down key

To end the exercise and start the cool down.

Change speed keys (in Run and Jog)

During the exercise, the + and - keys in the speed box can be used to change the speed of the treadmill belt. The speed increases or decreases by 0.1 km/h each time the key is pressed.
You can also use the Fast Track control on the right to change the speed.

Change gradient keys (in Run and Jog)

During the exercise, the + and - keys in the gradient box can be used to change the gradient of the treadmill belt. The gradient increases or decreases by 0.5% each time the key is pressed.
You can also use the Fast Track control on the right to change the gradient.
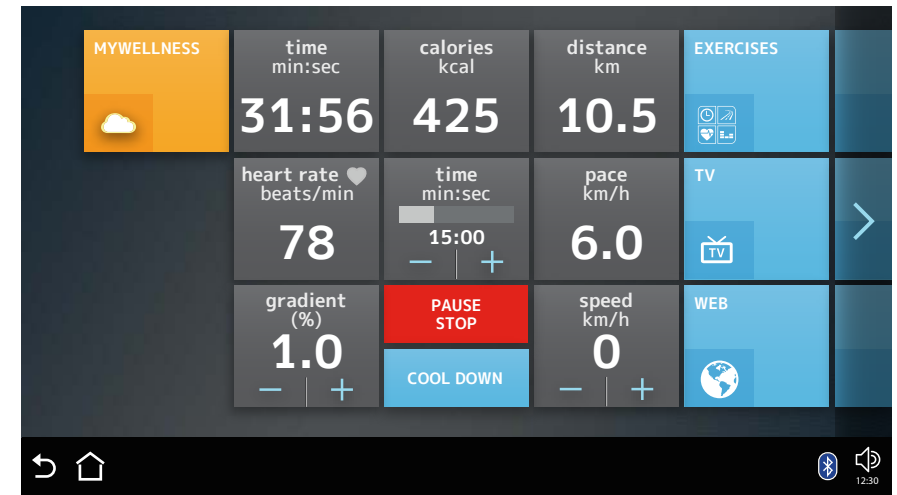
Change effort level keys (in Bike, Recline, Synchro, Vario, Step, Top and Climb)

During the exercise, the + and - keys in the **effort level** box can be used to change the effort level. The level increases or decreases by 1 unit each time the key is pressed.
The combination of effort level and speed of movement determines the workload or power expressed in watts. The power value during the exercise can be checked on the screen.

In the exercises that are driven from a constant workload (speed, power, heart rate), there are also the + and - keys to change the value of the workload.

Quick start

Exercises started with **Start** are on a time increase basis; the age and weight values are predefined, i.e. 30 years and 70 kilograms.

In Bike, Recline, Synchro and Vario, this exercise is performed at a constant torque and starts at effort level 1.

In Top this exercise is performed at a constant torque and starts at effort level 5.

In Step and in Climb, this exercise is performed at a constant speed and starts at effort level 1.

In Run, when starting the speed of the belt is 0.8 km/h, with a 0% gradient.

Warm Up

Warm Up is a specific Top Excite exercise and can be found in the **on trend** category.

The Warm Up is a warm up exercise for the upper part of the trunk performed at constant torque mode.

This warm up lasts 4 minutes, 3 minutes with the forward movement and 1 minute backwards.

The duration of the WARM UP can be modified in the configuration menu; in case of modification, the movement remains forward for the first 3/4 of the exercise, and backwards for the remaining 1/4.

At the end of the exercise there is no cool down.
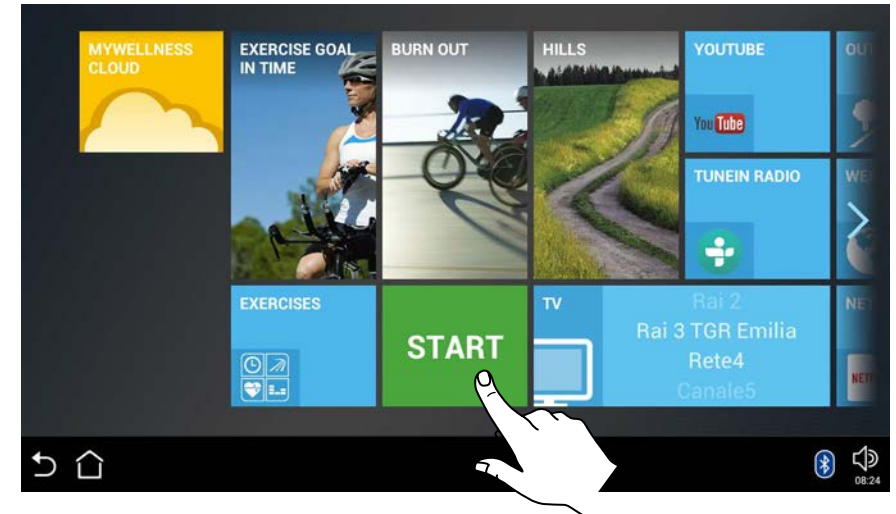
Hi-low blocks

The Hi-low blocks exercise can be found in the **On trend** category.

Challenging interval training to maximise exercise effectiveness: the Hi-low blocks profile is an alternative to the usual interval training and burns more calories.
It has a wide intensity range: from 80% to 140% of the selected effort level.
It improves aerobic endurance and the effectiveness of the workout can be immediately perceived.

To start this exercise, you must set the duration and effort level.

The minimum duration is 10 minutes.

The age and weight settings are optional.

Hills

The Hills exercise can be found in the **On trend** category.

Smooth variations around the level you choose: the Hills profile has slight changes in intensity.
Intensity ranges from 85% to 120% of the selected effort level.
It improves aerobic endurance more quickly and increases calorie consumption.

To start this exercise, you must set the duration and effort level.

The minimum duration is 10 minutes.

The age and weight settings are optional.

This profile manages the specific effort level specified by the user, calculated with the fitness test. You should therefore do the fitness test first and perform the exercise at an effort level that is no higher than the recommended one.
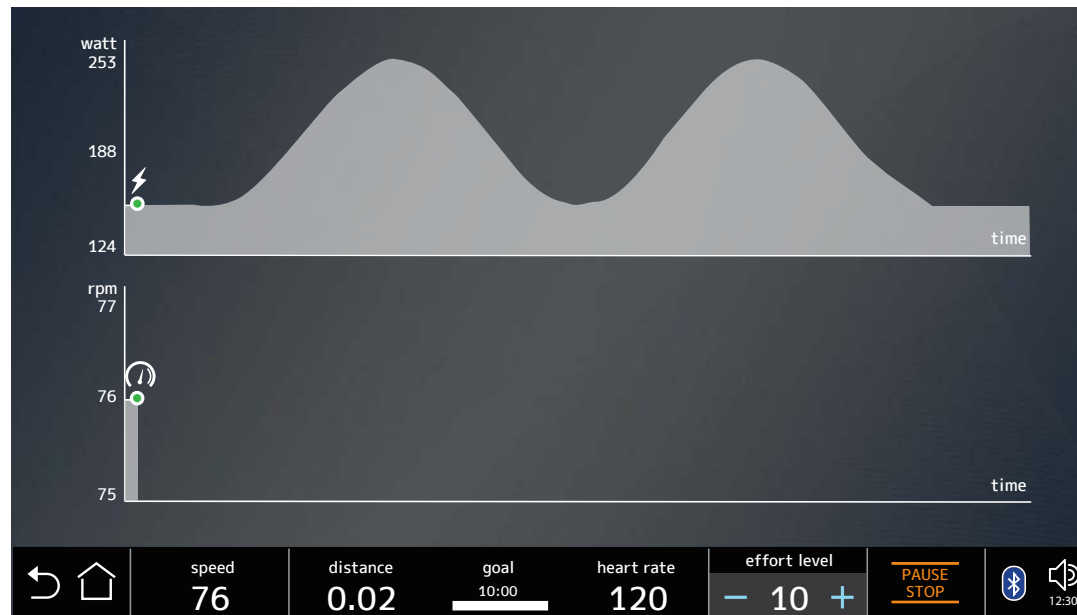
Burn out

The Burn out exercise can be found in the **On trend** category.

Intervals with self adaptive resistance; the Burn out profile consists of an anaerobic exercise performed at a constant speed.
It improves performance with a short duration exercise.

To start this exercise, you must set the duration and effort level.

The age and weight settings are optional.

This exercise is available in the Bike and Recline products.

Speed shift

The Speed shift exercise can be found in the **On trend** category.

The smartest way to do interval training you can easily change from one set exercise speed and another, using the Fast Track Control.

To start this exercise, you must set the speeds, which may be 2, 3 or 4 different speeds.

The age and weight settings are optional.

The exercise starts with the first speed you have set.

During the exercise use the Fast Track Control to go directly from one set speed to another.

This exercise is available in Run.

Runtronic Fast Track

Cross training

The Cross training exercise can be found in the **On trend** category.

Enjoy a great variety to kill boredom; the Cross training profile consists of a series of changes in intensity at a medium/high effort level.

To start this exercise, you must set the duration and effort level.

The age and weight values are optional.

Goal driven exercises

To start a goal driven exercise, you must first select one of the goals:

- time, i.e. the exercise duration,

- distance to cover,

- calories to burn.

Press the **Enter** key to continue.

Then select the goal value and press the **Enter** key to continue.

The age and weight settings are optional.

In Bike, Recline, Synchro and Vario, this exercise is performed at a constant torque and starts at effort level 1.

In Top this exercise is performed at a constant torque and starts at effort level 5.

In Step and in Climb, this exercise is performed at a constant speed and starts at effort level 1.

In Run, when starting the speed of the belt is 0.8 km/h, with a 0% gradient.

Fitness test

The fitness test is a sub-maximum test suitable for quite unfit or moderately fit users.

You need to wear the heart rate monitor to perform the test; if there is no heart rate signal the test does not start.

To start the test, you must enter your age, weight and gender.

The fitness test is in three stages; in the warm up stage the workload is determined externally; in the next two stages, the workload is internal, as it is determined by the heart rate.

Fitness test for Bike, Recline, Synchro, Vario

stage	time	workload
warm up	90 seconds	50 watts
1	3 minutes after reaching the workload	60% of the Max heart rate if the HR at the end of warm up is <= 100
		65% of the Max heart rate if the HR at the end of warm up is > 100
2	4 minutes after reaching the workload	75% of the Max heart rate

Fitness test for Run and Jog

stage	time	workload
warm up	90 seconds	speed 3.5 km/h and 0% gradient
1	3 minutes after reaching the workload	60% of the Max heart rate if the HR at the end of warm up is <= 100
		65% of the Max heart rate if the HR at the end of warm up is > 100
2	4 minutes after reaching the workload	75% of the Max heart rate

Fitness test

Fitness test for Climb

stage	time	workload
warm up	90 seconds	40 spm
1	3 minutes after reaching the workload	60% of the Max heart rate if the HR at the end of warm up is <= 100
1	3 minutes after reaching the workload	65% of the Max heart rate if the HR at the end of warm up is > 100
2	4 minutes after reaching the workload	75% of the Max heart rate

Fitness test for Step

stage	time	workload
warm up	90 seconds	50 spm
1	3 minutes after reaching the workload	60% of the Max heart rate if the HR at the end of warm up is <= 100
1	3 minutes after reaching the workload	65% of the Max heart rate if the HR at the end of warm up is > 100
2	4 minutes after reaching the workload	75% of the Max heart rate

Fitness test for Top

stage	time	workload
warm up	90 seconds	30 watt
1	3 minutes after reaching the workload	60% of the Max heart rate if the HR at the end of warm up is <= 100
1	3 minutes after reaching the workload	65% of the Max heart rate if the HR at the end of warm up is > 100
2	4 minutes after reaching the workload	75% of the Max heart rate

Fitness test

The test cannot be stopped for a pause.

When the **STOP** key is pressed, or if there is no heart rate signal for 100 consecutive seconds, the test is cancelled and it ends without giving any result.

At the end of the test the workload decreases for the cool down, during which the results are displayed.

Maximum heart rate reached

Absolute max VO2

Relative max VO2

Max mets

Training effort level

Max reached speed

Maximum power

The results may vary according to the type of equipment.

The fit test

The fit test is a submaximal type test available in the Bike and Recline products.

You need to wear the heart rate monitor to perform the test; if there is no heart rate signal the test does not start.

To start the test, you must enter your age, weight and gender and select the effort level

Select the level for the fit test			
	not very active person	**active person**	**very active person**
male	2 - 4	4 - 6	6 - 11
female	2 - 3	3 - 5	5 - 8

The fit test consists of two stages.

stage	time	workload
warm up	90 seconds	70% of the set level
1	5 minutes	set effort level

During the entire test, the speed must be between 60 and 80 rpm; if the speed is below 60 rpm or above 80 rpm, the test is cancelled, and is ended without indicating any result. The test is cancelled also if you press the **Stop** button.

The test cannot be stopped for a pause.

The fit test

At the end of the test the load decreases for the cool down, during which the results are displayed.

Absolute max VO2

Relative max VO2

Max mets

Effort level recommended for training

Maximum power

The Borg 15 test

The Borg test is a submaximal type test based on the person's training level; it makes it possible to calculate the value of the max VO2, starting from the load at which the user perceives the effort as "strong".
This test is available in the Bike and Recline products.

To start the test, you must enter your age and weight.

The test includes a warm up stage of 120 seconds at 30 watts. Then the load increases 15 watts every minute.

The test ends when the **Stop** key is pressed. The **Stop** key should be pressed when the user perceives the effort as being **strong** on a scale of 9 intensities:
- no effort
- very very weak
- very weak
- weak
- moderate effort
- somewhat strong
- strong
- very effort
- very very strong

At the end of the test the load decreases for the cool down, during which the results are displayed.

Absolute max VO2

Relative max VO2

Max mets

Effort level recommended for training

Maximum power

Test duration

Smart test

The smart test is based on a person's training level; it calculates the maximum VO2 according to the workload at which the user perceives the effort as "strong".

To do the test, the user must enter his/her training level, i.e. how trained the user feels and his/her weight.

During the test, the intensity gradually increases.

The test ends when the **Stop** key is pressed. The **Stop** key should be pressed when the user perceives the effort as being **strong** on a scale of 9 intensities:

- no effort

- very very weak

- very weak

- weak

- moderate effort

- somewhat strong

- strong

- very effort

- very very strong

If the user does not have to work hard, the test must be repeated, entering a higher training level.

The smart test is available in the Bike, Recline and Run products.

Single stage model

This type of test is available in Run. This is a submaximal protocol, in which the workload is set by the user.

You need to wear the heart rate monitor to perform the test; if there is no heart rate signal the test does not start.

To start the test, you must enter your age, weight and gender, as well as the speed and gradient.

The single stage model includes a 90 second warm up, at half the set speed and gradient of 0%; followed by a 5 minute effort stage.

When the **Stop** key is pressed, or if there is no heart rate signal for 100 consecutive seconds, the test is cancelled and it ends without giving any result.

Multistage model

This type of test is available in Run. This is a submaximal protocol, in which the workload is set by the user..

You need to wear the heart rate monitor to perform the test; if there is no heart rate signal the test does not start.

To start the test, you must enter your age, weight and gender; then the mode and the workload for each of the two effort stages.

In running mode, the minimum speed that can be set is 7.0 km/h; in walking mode, the maximum speed that can be set is 6.9 km/h.

The minimum workload for the second stage is the setting used for the first stage.

The multistage model includes a 90 second warm up, at 0% gradient and half the speed set for the first effort stage.

stage	time	workload
warm up	90 seconds	speed = 50% of the setting for stage 1, gradient 0%
1	4 minutes	speed and gradient set by the user
2	4 minutes	speed and gradient set by the user

When the **Stop** key is pressed, or if there is no heart rate signal for 100 consecutive seconds, the test is cancelled and it ends without giving any result.

The CPAT test (Candidate Physical Ability Test)

This type of test is available in Climb. The CPAT test is indicated to check the physical ability of firemen.

To perform this test, you must put a weight of 12.5 pound on your shoulders.

This is a submaximal protocol, carried out at a constant speed.

stage	time	speed
warm up	20 seconds	50 spm
1	3 minutes	60 spm

During the warm up stage, it is possible to momentarily grasp the handgrips on the side to acquire balance and cadence.

During the actual test stage, your arms must remain free and you must not grasp the handgrips.

If the **Stop** key is pressed, the test is cancelled.

The WFI test in Climb (Wellness Fitness Initiative)

This type of test is available in Climb. The WFI test is a protocol for evaluating the aerobic capacity of firemen.

To start the test, you must enter your age, weight and height.

You need to wear the heart rate monitor to perform the test; if there is no heart rate signal the test does not start.

The test includes a 3 minute warm up stage; During the warm up stage, it is possible to momentarily grasp the handgrips on the side to acquire balance and cadence.

The test is carried out by increasing the speed every minute, for a maximum duration of 16 minutes. During the actual test stage, your arms must remain free and you must not grasp the handgrips.

The test ends in one of the two following ways:

- when 85% of the max heart rate is exceeded for 15 consecutive seconds,

- at the end of 16 minutes.

The test is cancelled, therefore it ends without providing any result, in the following cases:

- if you press the Stop button;

- if there is no heart rate signal for 100 consecutive seconds.

At the end of the test the load decreases for the cool down, during which the results are displayed.

    Absolute max VO2

    Relative max VO2

    Max mets

    Effort level recommended for training

    Max heart rate

    Test duration

Maximal tests

This type of test is available in Run.

The the custom maximal test and the Wingate test are available in Top.

With the sole exception of the Technogym maximal test, we recommend wearing a heart rate monitor for maximal tests; if it is not worn, the maximum heart rate value cannot be calculated.

Subject to all medical-sports precautions, maximal tests are considered concluded when the **Stop** key is pressed. These are in fact tests to exhaustion which means the user presses the Stop key when the maximum effort he/she can withstand is reached. Maximal tests are therefore suitable for fit and expert users in good state of health.

However, in tests with a maximum number of stages, the test ends at the end of the last stage, even if the **Stop** key is not pressed. In this case it is recommended to perform a more stranuous test.

A 3 minute cool down follows, with workloads lower than those used during the test.

Technogym maximal test

The maximal test is a test to exhaustion suitable for a fit user in good state of health.

You need to wear the heart rate monitor to perform the test; If there is no heart rate signal the exercise does not start.

To perform this test your maximum heart rate is required as well as age, weight and gender; however, if you do not know your max heart rate, you may continue without entering it. In this case, a theoretical maximum heart rate based on your age will be used.

The maximal test is performed in running mode and is in two stages:

1) a **warm up** stage in constant heart rate mode lasting 15 minutes and divided into 3 five-minute steps, which takes the user to 75% of his/her maximum heart rate;

stage	time	workload
warm up_1	5 minutes	65% of the Max heart rate
warm up_2	5 minutes	70% of the Max heart rate
warm up_3	5 minutes	75% of the Max heart rate

2) a **test** stage, **not** in constant heart rate mode, with increases in speed every minute and 0% gradient.

The test ends when the user is exhausted and presses the **Stop** key.

If there is no heart rate signal for 100 consecutive seconds during the test, the test is cancelled, and ends without showing any result.

If the **Stop** key is pressed before the user has reached 85% of his/her maximum heart rate or before 60 seconds have elapsed, the test is cancelled, and ends without showing any result.

Custom maximal test for Run

The custom maximal test is for very fit users in good state of health.

To perform this test, in addition to age, weight and gender, you must also set the workloads:

- the starting speed,

- the speed increase between one step and the next,

- the duration of each step.

There is no specific warm up stage; therefore you are advised to set the first step or steps with appropriate workloads or to warm up for a few minutes before the test.

The test ends when the user is exhausted and presses the **Stop** key.

Custom maximal test for Top

The custom maximal test is for very fit users in good state of health.

The heart rate monitor is recommended: if it is not worn, the maximum heart rate value cannot be calculated.

To perform this test, in addition to age, weight and gender, you must also set the workloads:

- the starting power,

- the power increase between one step and the next,

- the duration of each step.

There is no specific warm up stage; therefore you are advised to set the first step or steps with appropriate workloads or to warm up for a few minutes before the test.

The test ends when the user is exhausted and presses the **Stop** key.

Il test di Wingate

The Wingate test is available in Top Excite. This is a maximal test for any category of user.

The heart rate monitor is recommended: if it is not worn, the maximum heart rate value cannot be calculated.

The Wingate test is performed at a constant torque and requires entry of the resistance.

Considering the maximum effort required, it is important that the test is preceded by a correct warm up lasting at least 10 minutes, and that it is followed by a cool down stage.

When the start message is displayed, you must go at maximum speed for 30 seconds.

The **Stop** key cancels the text.

Bruce test

The Bruce test is a maximal test for all user categories.
To start the test, you must enter your age, weight and gender.
There is no specific warm up stage for the Bruce test; you are advised to warm up for a few minutes before the test.

step	time	speed	gradient
1	3 minutes	2.7 km/h	10.0%
2	3 minutes	4.0 km/h	12.0%
3	3 minutes	5.5 km/h	14.0%
4	3 minutes	6.8 km/h	16.0%
5	3 minutes	8.0 km/h	18.0%

The test ends after 15 minutes or if the **Stop** key is pressed.

Bruce modified test

The Bruce modified test is a maximal test for any category of user, as well as high risk individuals.
To start the test, you must enter your age, weight and gender.
There is no specific warm up stage for the Bruce modified test; you are advised to warm up for a few minutes before the test.

step	time	speed	gradient
1	3 minutes	2.7 km/h	0.0%
2	3 minutes	3.7 km/h	5.0%
3	3 minutes	3.7 km/h	10.0%
4	3 minutes	4.0 km/h	12.0%
5	3 minutes	5.5 km/h	14.0%
6	3 minutes	6.8 km/h	16.0%
7	3 minutes	8.0 km/h	18.0%

The test ends after 21 minutes or if the **Stop** key is pressed.

Astrand modified test

The Astrand modified test is a maximal test for very fit users in good state of health.
To perform this test, in addition to age, weight and gender, you must also set the speed: the speed must be between 8.0 and 13.0 km/h.
You are advised to warm up for 5 minutes before the test, with a walk or a gentle run.

step	time	speed	gradient
1	3 minutes	set by the user	0.0%
2	2 minutes	set by the user	2.5%
3	2 minutes	set by the user	5.0%
4	2 minutes	set by the user	7.5%
5	2 minutes	set by the user	10.0%
6	2 minutes	set by the user	12.5%
7	2 minutes	set by the user	15.5%
8	2 minutes	set by the user	17.5%

The test ends after 17 minutes or if the **Stop** key is pressed.

Costill & Fox test

The Costill & Fox test is a maximal test for very fit users in good state of health.
To start the test, you must enter your age, weight and gender.
You are advised to warm up for 10 minutes before the test, with a walk or a gentle run.

step	time	speed	gradient
1	2 minutes	14.3 km/h	0.0%
2	2 minutes	14.3 km/h	2.0%
3	2 minutes	14.3 km/h	4.0%
4	2 minutes	14.3 km/h	6.0%
5	2 minutes	14.3 km/h	8.0%
6	2 minutes	14.3 km/h	10.0%
7	2 minutes	14.3 km/h	12.0
8	2 minutes	14.3 km/h	14.0
9	2 minutes	14.3 km/h	16.0%
10	2 minutes	14.3 km/h	18.0%

The test ends after 20 minutes or if the **Stop** key is pressed.

Naughton test

The Naughton test is a maximal test specific for the assessment of individuals with heart disease or at high risk.
To start the test, you must enter your age, weight and gender.
There is no specific warm up stage for the Naughton test; you are advised to warm up for a few minutes before the test.

step	time	speed	gradient
1	2 minutes	1.6 km/h	0.0%
2	2 minutes	3.2 km/h	0.0%
3	2 minutes	3.2 km/h	3.5%
4	2 minutes	3.2 km/h	7.0%
5	2 minutes	3.2 km/h	10.5%
6	2 minutes	3.2 km/h	14.0%
7	2 minutes	3.2 km/h	17.5%

The test ends after 14 minutes or if the **Stop** key is pressed.

Balke & Ware test

The Balke & Ware test is a maximal test for any category of user.

The workloads for the effort stage are different for men and women, and are divided as indicated in the tables below.

Men			
step	time	speed	gradient
1	1 minute	5.3 km/h	0.0%
2	1 minute	5.3 km/h	2.0%
3	1 minute	5.3 km/h	3.0%
4	1 minute	5.3 km/h	4.0%
5	1 minute	5.3 km/h	5.0%
6	1 minute	5.3 km/h	6.0%
7	1 minute	5.3 km/h	7.0%
8	1 minute	5.3 km/h	8.0%
9	1 minute	5.3 km/h	9.0%
10	1 minute	5.3 km/h	10.0%
11	1 minute	5.3 km/h	11.0%
12	1 minute	5.3 km/h	12.0%
13	1 minute	5.3 km/h	13.0%
14	1 minute	5.3 km/h	14.0%
15	1 minute	5.3 km/h	15.0%
16	1 minute	5.3 km/h	16.0%
17	1 minute	5.3 km/h	17.0%
18	1 minute	5.3 km/h	18.0%

Balke & Ware test

Women			
step	**time**	**speed**	**gradient**
1	3 minutes	4.8 km/h	0.0%
2	3 minutes	4.8 km/h	2.5%
3	3 minutes	4.8 km/h	5.0%
4	3 minutes	4.8 km/h	7.5%
5	3 minutes	4.8 km/h	10.0%
6	3 minutes	4.8 km/h	12.5%
7	3 minutes	4.8 km/h	15.0%
8	3 minutes	4.8 km/h	17.5%

To start the test, you must enter your age, weight and gender.

There is no specific warm up stage for the Balke & Ware test; you are advised to warm up for a few minutes before the test.

The test ends after the last step or if the **Stop** key is pressed.

Military tests

Apart from the Gerkin Protocol, which lasts 11 minutes, all other military tests have a distance as a goal, to be covered in the shortest possible time.

The gradient cannot be changed during these tests; the speed may be changed, to reach the goal in the shortest possible time.

At the end of test there is a 3-minute cool down stage at half the speed of the last speed detected and 0.0% gradient.

The test cannot be stopped for a pause.

All the military tests described are available for Run.

The Navy PRT test and the Air Force PRT test are available in the Bike and Recline products.

The Navy PRT test is available for Synchro.

The CPAT and WFI tests are available in Climb.

The Air Force PRT test for Bike and Recline

You need to wear the heart rate monitor to do the Air Force test; if there is no heart rate signal the test does not start.

To start the test, you must enter your age, weight, gender and number of workouts per week.

The test has a warm up stage lasting 2 minutes at 50 watts; then the workload increases to bring the heart rate up to over 125 beats per minute.
The increase in workload depends on age, gender and training level.

The goal of the test is to keep the heart rate at over 125 beats per minute for 6 minutes at a constant power.

If the heart rate has not reached the value required for the test, the power is increased every 2 minutes; the 6 minutes required to calculate the results start from the last workload increase.

stage	time	workload
warm up	2 minutes	50 watts
1	2 minutes	increase based on set parameters
2	2 minutes	+ 50 watts if HR is lower than 100 + 25 watts if HR is between 111 and 120 + 0 watts if HR is higher than 120
n	2 minutes	like step 2

Before starting, if the heart rate is already higher than 110 beats per minute when the data is entered, the test does not start.

During the test, it is important to maintain a pedal speed of between 50 and 80 rpm.

The Air Force PRT test for Bike and Recline

The test is cancelled and ends without giving any result in the following circumstances:

- if, at the end of the 6 minutes, the heart rate value goes back to below 125 beats per minute;

- if the heart rate value is over 85% of the theoretical max heart rate;

- if a speed of below 50 rpm or above 80 rpm is detected for more than 10 consecutive seconds;

- when the **Stop** key is pressed;

- if there is no heart rate signal for 100 consecutive seconds.

The Navy PRT test for Bike, Recline and Synchro

To start the test, you must confirm the duration and enter your body weight.

The heart rate monitor is not required.

The goal of the test is to achieve the maximum calorie consumption possible in 12 minutes; to increase calorie consumption, the exercise workload, i.e. speed and/or effort level is increased.

When the **Stop** key is pressed, the test is cancelled, and ends without showing any result.

The test cannot be stopped for a pause. If movement stops, the test continues and at the end of the test the calorie count includes the period in which there was no movement.

The Air Force PRT test for Run

The Air Force PRT test requires the user to cover **2.4 km**, with a 1% gradient, in the shortest possible time.

To start the test, you must enter your age, weight, gender and the initial speed.

When the **Stop** key is pressed, the test is cancelled, and ends without showing any result.

The Navy PRT test for Run

The Navy PRT test requires the user to cover **2.4 km**, with gradient 1%, in the shortest possible time.

To start the test, you must enter your age, weight, gender and the initial speed; you must also indicate whether the test is conducted at an altitude lower or higher than 1525 metres (5000 ft).

When the **Stop** key is pressed, the test is cancelled, and it ends without showing any result.

The IPPT test for Run

The IPPT test requires the user to cover **2.4 km**, with a 0% gradient, as quickly as possible.

To start the test, you must enter your age and initial speed.

If the **Stop** key is pressed, the test is cancelled, and ends without showing any result.

Gerkin Protocol

You need to wear the heart rate monitor to do the Gerkin Protocol military test; if there is no heart rate signal the test does not start.

To start the test, you must enter your age, weight and gender.

step	time	speed	gradient
warm up	3 minutes	4.8 km/h	0.0%
1	1 minute	7.2 km/h	0.0%
2	1 minute	7.2 km/h	2.0%
3	1 minute	8.0 km/h	2.0%
4	1 minute	8.0 km/h	4.0%
5	1 minute	8.8 km/h	4.0%
6	1 minute	8.8 km/h	6.0
7	1 minute	9.6 km/h	6.0
8	1 minute	9.6 km/h	8.0
9	1 minute	10.4 km/h	8.6
10	1 minute	10.4 km/h	10.0%
11	2 minutes	11.2 km/h	10.0%

The test ends when 85% of the maximum theoretical heart rate is exceeded; when the user exceeds 85% of the maximum theoretical heart rate, the workloads remain unchanged for 15 seconds, then the test ends.

If the user's heart rate does not reach 85% of the maximum theoretical rate or the **Stop** key is not pressed before the end of the last step, the test ends without showing any result.

Army PFT test

The Army PFT military test requires the user to cover **3.2 km**, with a 0% gradient, in the shortest possible time.

To start the test, you must enter your age, weight, gender and the initial speed.

When the **Stop** key is pressed, the test is cancelled, and ends without showing any result.

PEB (Federal Law Enforcement) test

The PEB military test requires the user to cover **2.4 km**, with a 0% gradient, in the shortest possible time.

To start the test, you must enter your age, weight, gender and the initial speed.

When the **Stop** key is pressed, the test is cancelled, and ends without showing any result.

The GTO test

The GTO military test requires the user to cover a specific distance that is calculated based on your gender and age, as quickly as possible.

To start the test, you must enter your age, weight, gender and initial speed; and the mode, that is with a 0% or variable gradient.

When the **Stop** key is pressed, the test is cancelled, and ends without showing any result.

Marine Corps PFT test

The Marine Corps PFT military test requires the user to cover **4.8 km**, with a 0% gradient, in the shortest possible time.

To start the test, you must enter your age, weight, gender and the initial speed: you must also indicate whether the test is conducted at an altitude lower or higher than 1370 metres (4500 ft).

When the **Stop** key is pressed, the test is cancelled, and ends without showing any result.

Preset profiles

The Preset profiles are in the **Advanced** exercise category.

These are variable workouts in which the effort level specified by the user and calculated with the fitness test is managed. You should therefore do the fitness test first and perform the exercise at an effort level that is no higher than the recommended one.

The heart rate monitor is not needed for preset profiles workouts.

To start the exercise:

- select a profile;

- select a goal, time, distance or calories;

- set the goal value;

- set the effort level.

If the effort level or goal value are changed during the exercise, the change will apply to the parameters of the remaining profile and not to the single step in progress.

Create your own

The Create your own exercise is in the **Advanced** exercises category.

It can be used to create a personal profile consisting of a number of steps, up to a maximum of 30. The workload and duration are defined when programming each step.

To set the exercise when using Bike, Recline, Synchro and Vario:

- select a goal, time or distance;

- set the goal value for each step;

- set the power for each step.

To set the exercise when using Step and Climb:

- select a goal, time or distance;

- set the goal value for each step;

- set the speed for each step.

Run has two types of profiles:

- create your own in km/h (speed);

- create your own in min/km (pace);

To set the exercise:

- select a goal, time or distance;

- set the goal value for each step;

- set the speed and the gradient or the pace and gradient for each step.

If the workload is changed during the exercise, the change will apply only to the single step in progress.

Constant heart rate (CPR) exercise

The constant heart rate exercise is very important in situations where specific heart rate levels have to be maintained. In the constant heart rate exercise the exercise workload is automatically adjusted to take the heart rate to the preselected level and keep it constant throughout the entire exercise duration.

The heart rate value that must be maintained during the exercise is inserted when programming the exercise.

The heart rate monitor is needed for the constant heart rate exercise. If there is no heart rate signal the exercise does not start.

To start the exercise:

- select a goal, time, distance or calories;

- set the goal value;

- set the age;

- for Run, select the mode, either walking or running;

- set the heart rate value that must be kept constant during the exercise;

- press **Start**.

If there is no heart rate signal for 100 consecutive seconds, the CPR exercise cannot continue; you can choose to:

- continue the exercise, which becomes a goal driven exercise and is no longer at constant heart rate;

- end the exercise.

Training zone exercise

The Training zone exercise is performed at constant heart rate; the training heart rate is determined by the user's fitness level, who must select the workout intensity: light, moderate or hard.

The heart rate monitor is needed for the constant heart rate exercise. If there is no heart rate signal the exercise does not start.

To start the exercise:

- set the age;
- for Run, select the mode, either walking or running;
- select the exercise intensity;
- select the exercise duration;
- press **Start**.

If there is no heart rate signal for 100 consecutive seconds, the Training Zone exercise cannot continue; you can choose to:

- continue the exercise, which becomes a goal driven exercise and is no longer at constant heart rate;
- end the exercise.

Weight loss exercise

The aim of the Weight loss exercise is to burn the maximum amount of calories in the time available.

The Weight loss workout is in two stages: a first processing stage at constant heart rate; and a second stage with the actual exercise. The heart rate monitor is therefore needed, at least during the first stage; If there is no heart rate signal the exercise does not start.

To start the exercise:

- set the age;

- set the gender;

- for Run, select the mode, either walking or running;

- select the exercise duration; the total duration must not be less than 10 minutes, as the first minutes of the exercise are needed to calculate the user's training heart rate and process the parameters of the actual exercise;

- press **Start**.

During the first stage of the exercise, if there is no heart rate signal for 100 consecutive seconds, the exercise ends.

The Weight Loss exercise is not available on Top.

The routines

The routines are available in Climb. They are exercise sequences, where the movements of climbing the stairs are alternated with jumps, extensions and forward lunges.

- Sweat it out: sequence of exercises targeted towards optimising the consumption of fat and increases energy expenditure.

- B-Side: sequence of exercises targeted towards shaping the lower part of your body and improve resistance.

- Body buster: sequence of exercises for testing your muscular capacity and performance.

To start the exercise, select the duration and effort level.

The routine ends with a minute of cool down.

Cool down

At the end of each exercise and test, if it lasted at least one minute, there is a cooling down stage at half the load of the exercise just completed.
The workloads can be modified using the corresponding keys in the same way as during the exercise.

The workout results, which vary according to the type of equipment and exercise, are displayed.

Heart rate results are only shown if the heart rate monitor has been used during the exercise for at least 3 minutes.

This stage can be started at any time during the exercise by pressing the **Cool down** key.

To stop the Cool down, press the **Stop** key.

Configuration menu

To customise the product configuration, press any key to open the Home Page.

Then press the lower left corner of the screen, to the right of the HOME symbol; or the lower right corner, on the Clock symbol.

Enter the password 2 4 0 6, then press ENTER.

The parameters to be configured are divided into various categories:

- General settings
- Exercise settings
- Home page
- Date and time
- Network
- Touchscreen calibration

Press the BACK symbol on the status bar to exit the configuration menu.

Configuration menu

General settings

There are two keys for saving all the configuration settings on a USB key; or to import all the configuration settings from a USB key. This is a simple way to transfer the entire content of this menu from one product to another.

The following parameters can be set on this page.

Language. To select the interface language.

Unit of measure. To select the unit of measurement: either kilometres and kilograms (km) or miles and pounds (mls).

Facility URL. To set the internet address (URL) Technogym assigned to the club.

Internet. To enable or disable the Internet connection (only in models with an internet connection).

TV. To enable or disable the TV (only in models with a TV connection).

The set value is shown next to the name of the parameter.

Configuration menu

Exercise settings

Select the maximum duration of the exercise.
With this function all exercises are automatically interrupted when they reach the set time; for example, if a max time of 30 minutes has been set and an exercise is started without any setting with the Start key, the workout ends after 30 minutes.
The maximum duration of the exercise is set in minutes.
This does not apply to exercises memorised on the TGS key.

Select the maximum pause time.
To set the maximum time of a pause during an exercise. After the time set here, the pause ends and the exercise is terminated.
The maximum pause time is set in seconds.

Select the cool down time.
To select the cool down time, from 5 to 180 seconds.

Select the Warm Up time.
It is present in Top Excite, to modify the Warm Up exercise duration up to a maximum of 10 minutes.
The exercise duration is set in seconds.

Select the speed for user present
To set the speed at which the user present function starts. It is present in Run and in Jog.

Enable or disable gradient.
To enable or disable the gradient of the treadmill belt. It is present in Run and in Jog.

Select the LED for completed exercise time
To set the number of minutes before the end of the exercise you must turn on the led located at the end of the side grip, to indicate that the product will soon be available: **in motion light**. It is present in Run and in Jog.

Configuration menu

Home page settings

Enable or disable screensaver.
If the product is not used, the screen will turn off; otherwise, you can select to have a screensaver activated before the screen turns off.

Select screensaver time.
This function, which is present if the screensaver has been activated, is used to set for how many minutes the screensaver stays on before the screen will turn off.

Choose whether to reduce brightness in the home page.
This function is used to reduce the brightness of the screen, when the home page is displayed.

Select no. of seconds before reducing brightness.
This function, which is present if the previous function has been activated, is used to set after how many seconds the brightness is reduced, after the home page has been displayed.

Enable or disable language modification.
If you select the modifiable option, there will be a key on the home page for selecting the interface language.

Configuration menu

Date and time settings

Select time format.

You can select between a 12 or 24 clock.

Enable or disable use of data from mywellness network.

The network detects the latitude and longitude, and sets the time zone as a result.

Enable or disable use of time from the network.

Active, if the previous option has been activated.

Set time.

If the option for detecting the network time is not active, the time can be set manually.

Configuration menu

TV settings

The TV settings are divided into 4 pages; present only in models with a TV connection.

Channels
This page is used to manage the channel list.
You can search for digital, analogue or cable channels.

Picture
For managing colour, contrast, brightness, hue.

TV Standard
To select the TV standard, based on the country where the product is located.

Save

The save keys are present on this page.

- **Save on USB key**
For saving all the TV settings to a USB key and transfer them to different products.

- **Import USB key**
To import all the TV settings from a USB key. This is a simple way to transfer all the TV settings from one product to another.

- **Save changes**
To save the changes made to the TV settings.

- **Clear all channels**
To delete all the saved TV channels.

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