

Owner's Manual

Model No.
16611401000
CE1000ENT

- Assembly
- Operation
- Adjustments
- Parts
- Warranty

CAUTION:

Read and understand this manual before operating unit

Retain For Future Reference

SPIRIT



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Thank you for purchasing our product, please save these instructions. Please do not perform or attempt any customizing, adjustments, repair or maintenance that is not described in this manual.

SPIRIT

**CONGRATULATIONS ON YOUR
NEW ELLIPTICAL AND WELCOME
TO THE SPIRIT FAMILY!**

Thank you for your purchase of this quality elliptical from Dyaco Canada Inc. Your new elliptical was manufactured by one of the leading fitness manufacturers in the world and is backed by one of the most comprehensive warranties available. Through your dealer, Dyaco Canada Inc. will do all we can to make your ownership experience as pleasant as possible for many years to come. The local dealership where you purchased this elliptical is your administrator for all warranty and service needs. Their responsibility is to provide you with the technical knowledge and service personnel to make your experience more informed and any difficulties easier to remedy.

Please take a moment at this time to record the name of the dealer, their telephone number, and the date of purchase below to make any future needed contact easy. We appreciate your support, and we will always remember that you are the reason that we are in business.

Please go to www.dyaco.ca/warranty.html and complete the online warranty registration.

Yours in Health,
Dyaco Canada Inc.

Name of Dealer _____

Telephone Number of Dealer _____

Purchase Date _____

Product Registration

RECORD YOUR SERIAL NUMBER

Please record the Serial Number of this fitness product in the space provided below.

Serial Number _____

REGISTER YOUR PURCHASE

Please visit us at www.dyaco.ca/warranty.html to register your purchase.

BEFORE YOU BEGIN

Thank you for choosing the SPIRIT CE1000ENT Elliptical. We take great pride in producing this quality product and hope it will provide many hours of quality exercise to make you feel better, look better, and enjoy life to its fullest. It's a proven fact that a regular exercise program can improve your physical and mental health. Too often, our busy lifestyles limit our time and opportunity to exercise. The SPIRIT CE1000ENT Elliptical provides a convenient and simple method to begin your assault on getting your body in shape and achieving a happier and healthier lifestyle. Before reading further, please review the drawing below and familiarize yourself with the parts that are labelled.

Read this manual carefully before using the SPIRIT CE1000ENT Elliptical. Although Dyaco Canada Inc. constructs its products with the finest materials and uses the highest standards of manufacturing and quality control, there can sometimes be missing parts or incorrectly sized parts. If you have any questions or problems with the parts included with your SPIRIT CE1000ENT Elliptical, please do not return the product. Contact us **FIRST!** If a part is missing or defective, call us toll-free at 1-888-707-1880. Our Customer Service Staff are available to assist you from 8:30 A.M. to 5:00 P.M. (Eastern Time) Monday through Friday. Be sure to have the name and model number of the product available when you contact us.



SAFETY PRECAUTIONS

IMPORTANT SAFETY INFORMATION READ ALL INSTRUCTIONS BEFORE USING THIS ELLIPTICAL

CAUTION: Before starting any exercise program, it is recommended that you consult your physician.

Thank you for purchasing our product. Even though we make great efforts to ensure the quality of each product we produce, occasional errors and/or omissions do occur. In any event, should you find this product to have either a defective or a missing part, please contact us for a replacement.

This exercise equipment was designed and built for optimum safety. However, certain precautions apply whenever you operate a piece of exercise equipment. Be sure to read the entire manual before assembly and operation of this machine. Also, please note the following safety precautions:

1. Read the OWNER'S OPERATING MANUAL and all accompanying literature and follow it carefully before using your elliptical.
2. It is the responsibility of the owner to ensure that all users of the elliptical exerciser are adequately informed of all precautions.
3. If dizziness, nausea, chest pains, or any other abnormal symptoms are experienced while using this equipment, STOP the workout at once. CONSULT A PHYSICIAN IMMEDIATELY.
4. Inspect your exercise equipment prior to exercising to ensure that all nuts and bolts are fully tightened before each use.
5. The elliptical must be regularly checked for signs of wear and damage. Any part found defective; the part must be replaced with a new spare part from the manufacturer.
6. Fitness equipment must always be installed on a flat surface; do not place the unit on a loose rug or uneven surface. It is recommended to use an equipment mat to prevent the unit from moving while it is being used, which could possibly scratch or damage the surface of your floor. Keep the elliptical exerciser indoors, away from moisture and dust.
7. No changes must be made which might compromise the safety of the equipment.
8. It is recommended to have a minimum of 1' safe clearance around the exercise equipment while in use.
9. Keep children and pets away from this equipment at all times while exercising.
10. Warm up 5 to 10 minutes before each workout and cool down 5 to 10 minutes afterward. This allows your heart rate to gradually increase and decrease and will help prevent you from straining muscles.
11. Never hold your breath while exercising. Breathing should remain at a normal rate in conjunction with the level of exercise being performed.
12. Always wear suitable clothing and footwear while exercising. Do not wear loose-fitting clothing that could become entangled with the moving parts of your elliptical.
13. Always hold the handlebars when mounting, dismounting, or using the elliptical exerciser.
14. Keep your back straight when using the elliptical exerciser; do not arch your back.
15. When you stop exercising, allow the pedals to slowly come to a complete stop. The elliptical exerciser does not have a freewheel; the pedals will continue to move until the flywheel stops.
16. Always unplug the power cord immediately after use and before cleaning the elliptical exerciser.
17. If decals on the elliptical exerciser are missing or illegible, please call our customer service department toll-free at 1-888-707-1880 and order a replacement decal.
18. Care must be taken when lifting or moving the equipment so as not to injure your back. Always use proper lifting techniques.
19. User weight should not exceed 450 lbs. (205 kgs)

WARNING: Before beginning any exercise program, consult your physician. This is especially important for individuals over the age of 35 or persons with pre-existing health problems. Read all instructions before using any fitness equipment. We assume no responsibility for personal injury or property damage sustained by or through the use of this product.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

WARNING - Read all instructions before using this equipment.

DANGER - To reduce the risk of electric shock, disconnect your elliptical from the electrical outlet prior to cleaning and/or service work.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons, install the elliptical on a flat level surface with access to a 120Vac (adapter 24Vdc/5A) grounded outlet with only the elliptical plugged into the circuit.

DO NOT USE AN EXTENSION CORD UNLESS IT IS A 14 AWG OR BETTER, WITH ONLY ONE OUTLET ON THE END: DO NOT ATTEMPT TO DISABLE THE GROUNDED PLUG BY USING IMPROPER ADAPTERS OR IN ANY WAY MODIFYING THE CORD SET.

- Do not operate elliptical on deeply padded, plush or shag carpet. Damage to both carpet and elliptical may result.
- Keep children away from the elliptical. There are obvious pinch points and other caution areas that can cause harm.
- Keep hands away from all moving parts.
- Never operate the elliptical if it has a damaged cord or plug. If the elliptical is not working properly, call your dealer.
- Do not operate where aerosol spray products are being used or where oxygen is being administered. Sparks from the motor may ignite a highly gaseous environment.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position, then remove the plug from the outlet.
- Please make sure that the power supply cord is placed in a dry area and kept away from heat.
- Do not attempt to use your elliptical for any purpose other than for the purpose it is intended.
- The hand pulse sensors are not medical devices. Various factors, including the user's movement, may affect the accuracy of heart rate readings. The pulse sensors are intended only as exercise aids in determining heart rate trends in general.
- Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on your elliptical. Quality athletic shoes are recommended to avoid leg fatigue.
- This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the equipment by a person responsible for their safety.
- Keep children under the age of 13 away from this machine.
- Children should be supervised to ensure that they do not play with the exercise equipment.
- Notes on the correct posture and the fact the pedal crank training equipment of classes B and C are not suitable for therapeutic purposes

WARNING! Heart rate monitoring systems may be inaccurate. Over-exercising may result in serious injury or death. If you feel faint, stop exercising immediately”.

WARNING! Injuries to health may result from incorrect or excessive training.

- The elliptical trainer is not equipped with a freewheel, and therefore, the moving parts cannot be stopped immediately.

WARNING! The individual human power which is required to carry out an exercise can be different than the mechanical power displayed.

- The exercise equipment shall be disconnected from its power source during cleaning, service or maintenance.
- This exercise equipment is not intended for use by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
- Before beginning this or any exercise program, consult a physician. This is especially important for persons over the age of 35 or persons with pre-existing health conditions.
- Close supervision is necessary when this exercise equipment is used by or near children, invalids, or disabled persons.

WARNING! The equipment shall be installed on a stable base and properly levelled.

WARNING

- **INGESTION HAZARD:** This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours**.
- **KEEP** new and used batteries **OUT OF REACH of CHILDREN**
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body.



- a) Remove and immediately recycle or dispose of used batteries according to local regulations and keep them away from children. Do NOT dispose of batteries in household trash or incinerate them.
- b) Even used batteries may cause severe injury or death.
- c) Call a local poison control center for treatment information.
- d) Compatible battery type : CR1220
- e) Nominal battery voltage : 3V
- f) Non-rechargeable batteries are not to be recharged.
- g) Do not force discharge, recharge, disassemble, heat above temperature 85°C or incinerate. Doing so may result in injury due to venting, leakage or explosion, resulting in chemical burns.
- h) Contains a non-removable battery. Only professionals are allowed to disassemble it.

SAVE THESE INSTRUCTIONS - THINK SAFETY!

IMPORTANT ELECTRICAL INSTRUCTIONS

WARNING!

NEVER remove any cover without first disconnecting AC power. If voltage varies by ten percent (10%) or more, the performance of your elliptical may be affected. Such conditions are not covered under your warranty. If you suspect the voltage is low, contact your local power company or a licensed electrician for proper testing.

NEVER expose this elliptical to rain or moisture. This product is NOT designed for use outdoors, near a pool or spa, or in any other high-humidity environment. The temperature specification is 40 degrees C, and humidity is 95%, non-condensing (no water drops forming on surfaces).

Circuit breakers: Avoid AFCI/GFCI circuit breakers if possible. These breakers may trip occasionally during use because of the high inrush currents from the elliptical drive motor. This condition is an issue with all elliptical and other products with large motors or electric heating elements like ovens.

New laws in your area may require these breakers. If you do have these breakers and outlets in your home and are experiencing nuisance tripping, you should check to see if there are any other devices plugged into the same circuit, like fluorescent lights with electronic ballasts, coffee makers, space heaters, etc. Optimally, the elliptical should be the only device plugged into the circuit.

Our ellipticals have surge suppressors built in to help avoid nuisance tripping. We have tested several AFCI/GFCI breakers and outlets with our products that do not trip when only the elliptical is connected. Brands we have tested are Eaton (Cutler Hammer Series), Leviton (Smart lock Pro) and Schneider Electric (Canadian home series).

IMPORTANT OPERATION INSTRUCTIONS

NEVER operate this elliptical without reading and completely understanding the results of any operational change you request from the computer.


- **NEVER** use your elliptical during an electrical storm. Surges may occur in your facility's power supply that could damage the elliptical components.
- **All users** should have medical clearance before starting any rigorous exercise program. This is especially important for persons with a history of heart disease or other high-risk factors.
- Understand that changes in resistance do not occur immediately. Set your desired resistance level on the computer console and release the adjustment key. The computer will obey the command gradually.
- Use caution while participating in other activities while pedalling on your elliptical, such as watching television, reading, etc. These distractions may cause you to lose balance, which may result in serious injury.
- Do not use excessive pressure on console control keys. They are precision set to function properly with little finger pressure.
- Always hold on to a handlebar while making control changes.
- If you feel the buttons are not functioning properly with normal pressure, contact your dealer.



POWER CONNECTOR – FRONT SIDE OF UNIT

WARNING DECAL REPLACEMENT

The decal shown below has been placed on the elliptical. If the decal is missing or illegible, please call our Customer Service Department toll-free at 1-888-707-1880 to order a replacement decal.

 **WARNING / AVERTISSEMENT**

Model/Modèle#: [REDACTED]
Serial#/Numéro de série: [REDACTED]

**For consumer use only.
Max user weight limit**
[REDACTED]

CAUTION: SMALL CHILDREN AND PERSONS PHYSICALLY HANDICAPPED SHOULD NOT USE ANY EXERCISE EQUIPMENT WITHOUT A QUALIFIED PERSON IN ATTENDANCE.
WARNING: KEEP CHILDREN AWAY FROM THE [REDACTED]
KEEP BODY AND CLOTHING FREE AND CLEAR OF ALL MOVING PARTS. THE POSSIBILITY OF SERIOUS INJURIES OR DEATH IF CAUTION IS NOT USED.
READ ALL WARNINGS AND INSTRUCTIONS PRIOR TO USE. REPLACE LABEL IF DAMAGED, ILLEGIBLE OR REMOVED.

**Usage à des fins
personnelles seulement
poids maximum de l'utilisateur**
[REDACTED]

ATTENTION: LES ENFANTS ET LES PERSONNES AYANT UN HANDICAP PHYSIQUE NE DOIVENT UTILISER AUCUN APPAREIL D'EXERCICE SANS LA SURVEILLANCE D'UNE PERSONNE QUALIFIÉE.
AVERTISSEMENT: GARDER LES ENFANTS À L'ÉCART DU [REDACTED]. GARDER LE CORPS ET LES VÊTEMENTS ÉLOIGNÉS DE TOUTE PIÈCE MOBILE. LE DÉFAUT DE VIGILANCE DANS L'UTILISATION DE CET APPAREIL POURRAIT ENTRAÎNER DE GRAVES BLESSURES ET MÊME LA MORT. LIRE TOUS LES AVERTISSEMENTS ET TOUTES LES DIRECTIVES AVANT UTILISATION.
REMPLEZER TOUTE ÉTIQUETTE ENDOMMAGÉE, ILLISIBLE OU MANQUANTE.

**Dyaco Canada Inc.
5955 Don Murie St
Niagara Falls, Ontario
L2G 0A9**

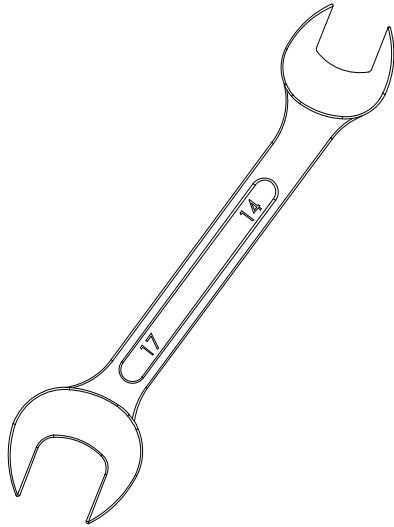
**Customer Service
Service à la clientèle
1-888-707-1880**

ASSEMBLY INSTRUCTIONS

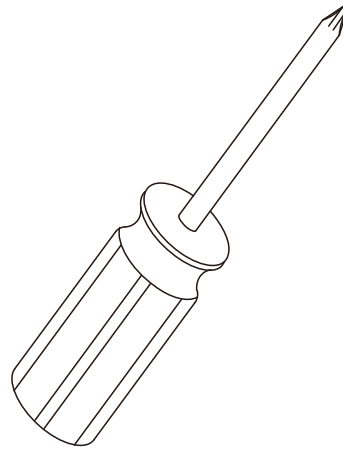
PRE-ASSEMBLY

1. Carefully remove all parts from the carton and inspect for any damage or missing parts. If damaged parts are found or parts are missing, contact your dealer immediately.
2. Locate the hardware package. The hardware is separated into four steps. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) are the item number from the assembly drawing for reference.

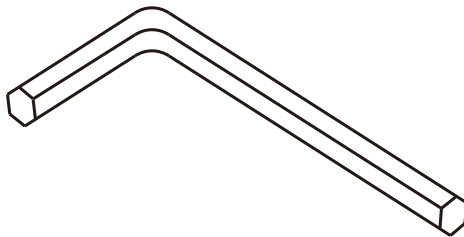
ASSEMBLY TOOLS



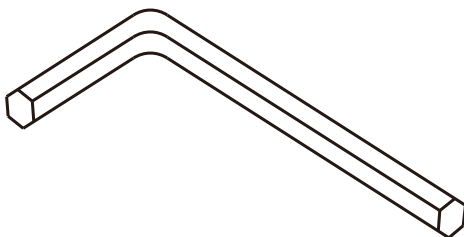
#135. 14/17 mm
Wrench (1 pc)



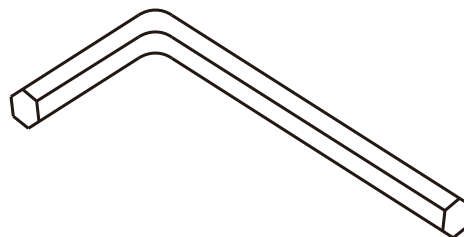
#131. Phillips Head
Screwdriver (1 pc)



#134. M8 L Allen Wrench (1 pc)



#133. 6mm L Allen Wrench (1 pc)



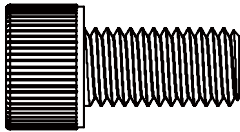
#132. 5mm L Allen Wrench (1 pc)

ASSEMBLY PACK CHECKLIST

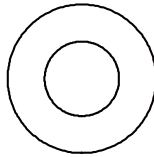
STEP 1



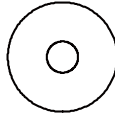
#46 – 3.5 × 12mm
Sheet Metal Screw (2pcs)



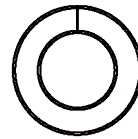
#54 – M10 × 20mm
Socket Head Cap Bolt (12pcs)



#65 – Ø3/8" × Ø19 × 1.5T
Flat Washer (4pcs)

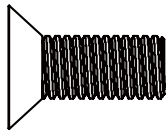


#58 – Ø4 × 14 × 1.0T
Flat Washer (2pcs)

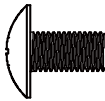


#57 – Ø10 × 2T
Split Washer (4pcs)

STEP 2-1



#150 – M8 × 20mm Flat Head
Countersink Bolt (4pcs)

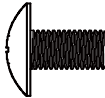


#156 – M5 × 10mm
Phillips Head Screw (4pcs)

STEP 2-2



#47 – 5 × 16mm
Sheet Metal Screw (2pcs)

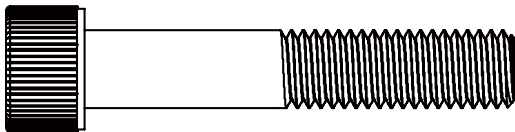


#156 – M5 × 10mm
Phillips Head Screw (8pcs)

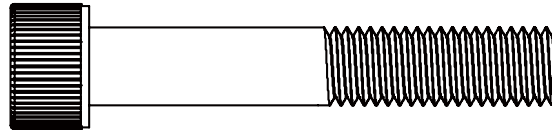


#78 – M5 Speed Nut Clip
(2pcs)

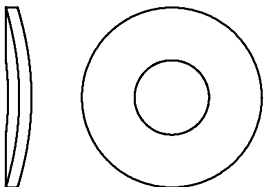
STEP 3



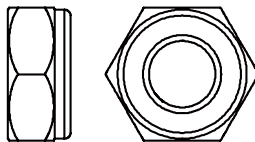
#43 – M10 × 55mm
Socket Head Cap Bolt (2pcs)



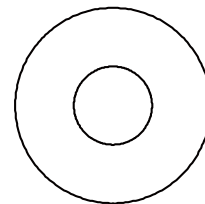
#44 – M10 × 60mm
Socket Head Cap Bolt (4pcs)



#68 – Ø10 × Ø23 × 1.5T
Curved Washer (2pcs)

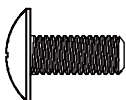


#71 – M10 × 8T
Nyloc Nut (6pcs)

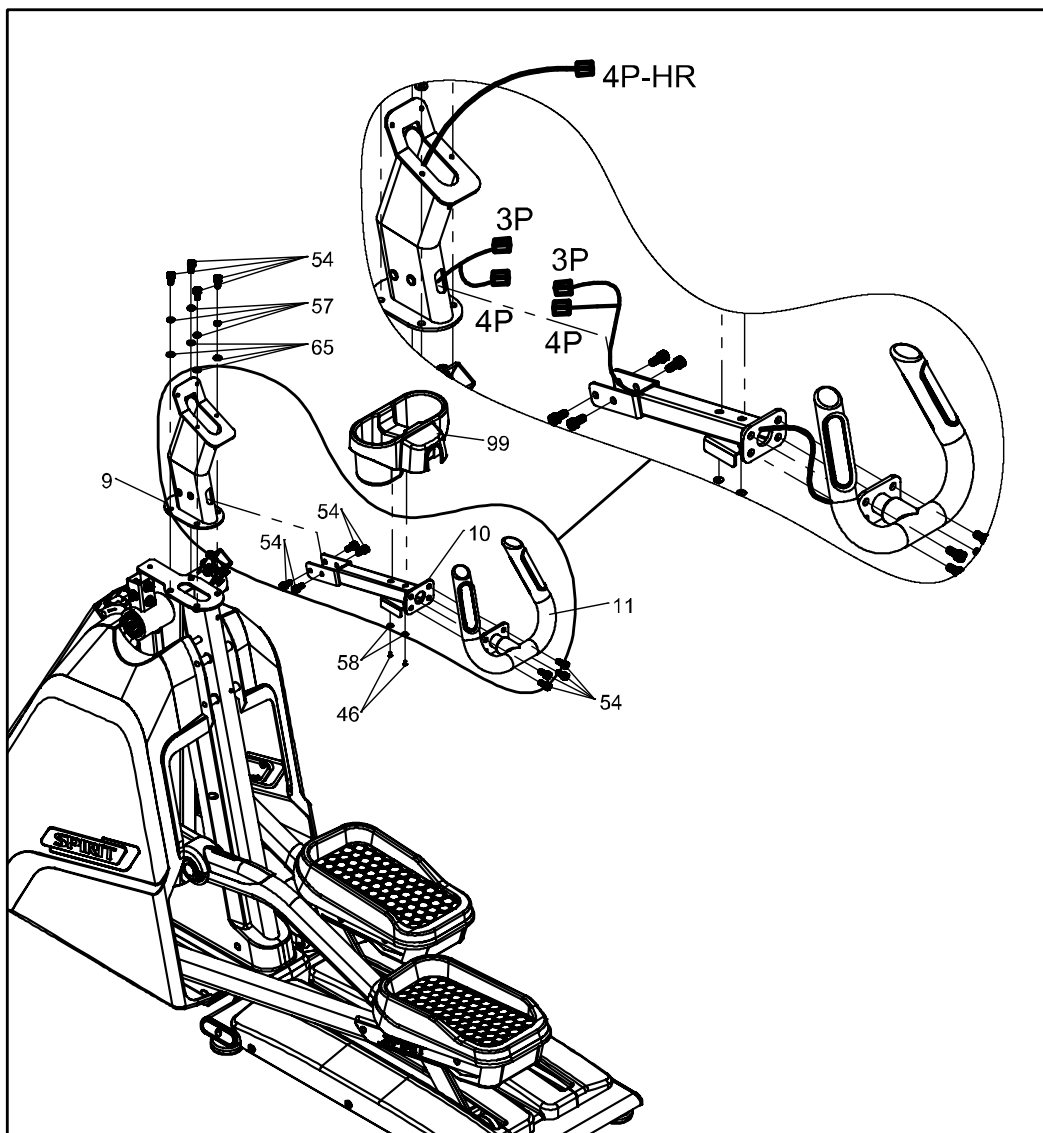


#63 – Ø10 × Ø25 × 1.5T
Flat Washer (10pcs)

STEP 4

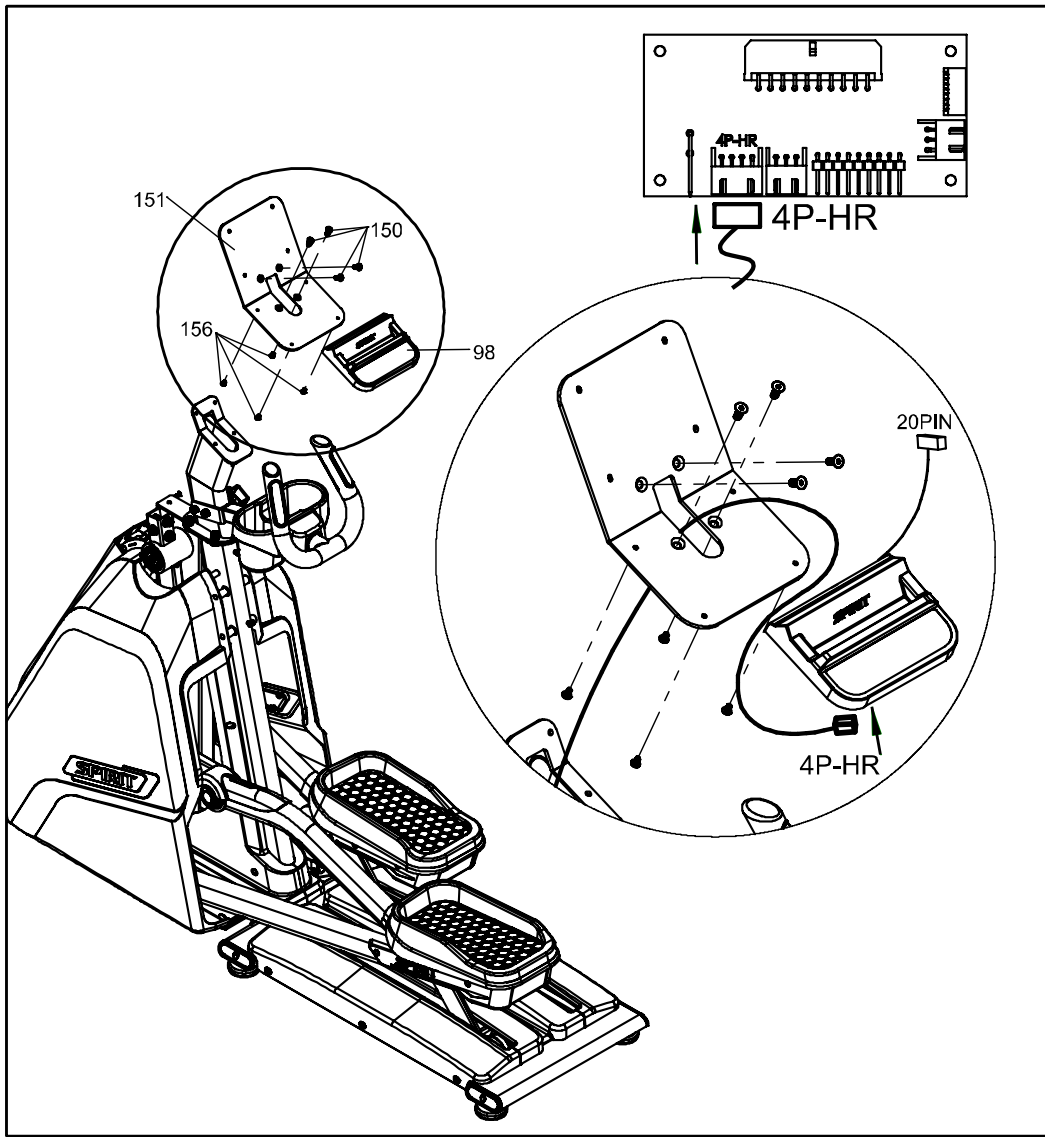


#49 – M5 × 12mm
Phillips Head Screw
(4pcs)



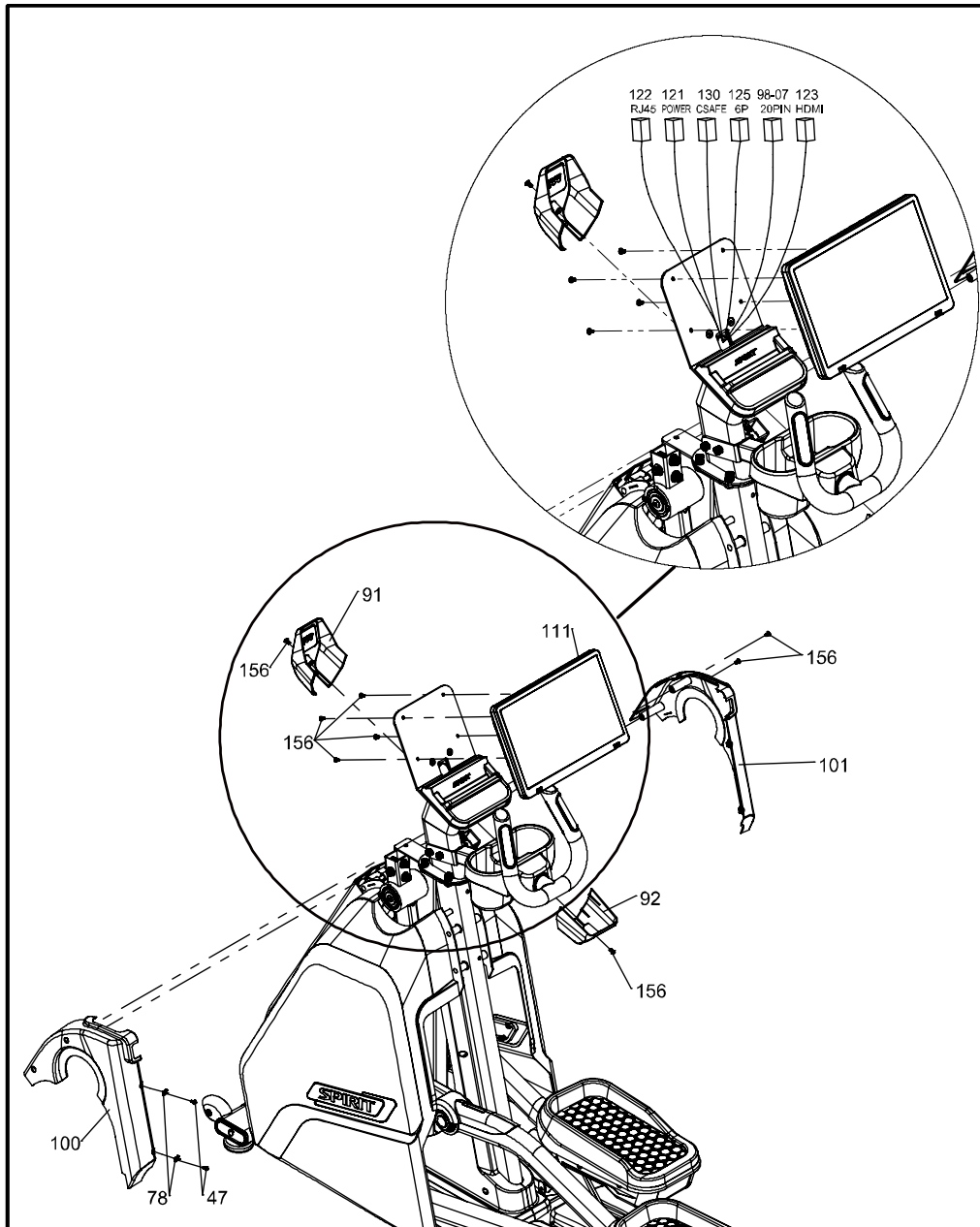
STEP 1

1. Unwind wiring harness and run wires up through CONSOLE MAST (9). Bolt CONSOLE MAST (9) to MAIN FRAME (1) using 4 BOLTS (54), 4 SPLIT WASHERS (57), and 4 WASHERS (65). Do not pinch wires.
2. Run wires from CENTER HANDLEBARS (11) through HANDLEBAR BRACKET (10), into CONSOLE MAST (9) and out the top.
3. Install CENTER HANDLEBARS (11) to HANDLEBAR BRACKET (10) using 4 BOLTS (54).
4. Install HANDLEBAR BRACKET (10) to CONSOLE MAST (9) using 4 BOLTS (54).
5. Attach CUP HOLDER (99) to HANDLEBAR BRACKET (10) using 2 SHEET METAL SCREWS (46) and 2 WASHERS (58).



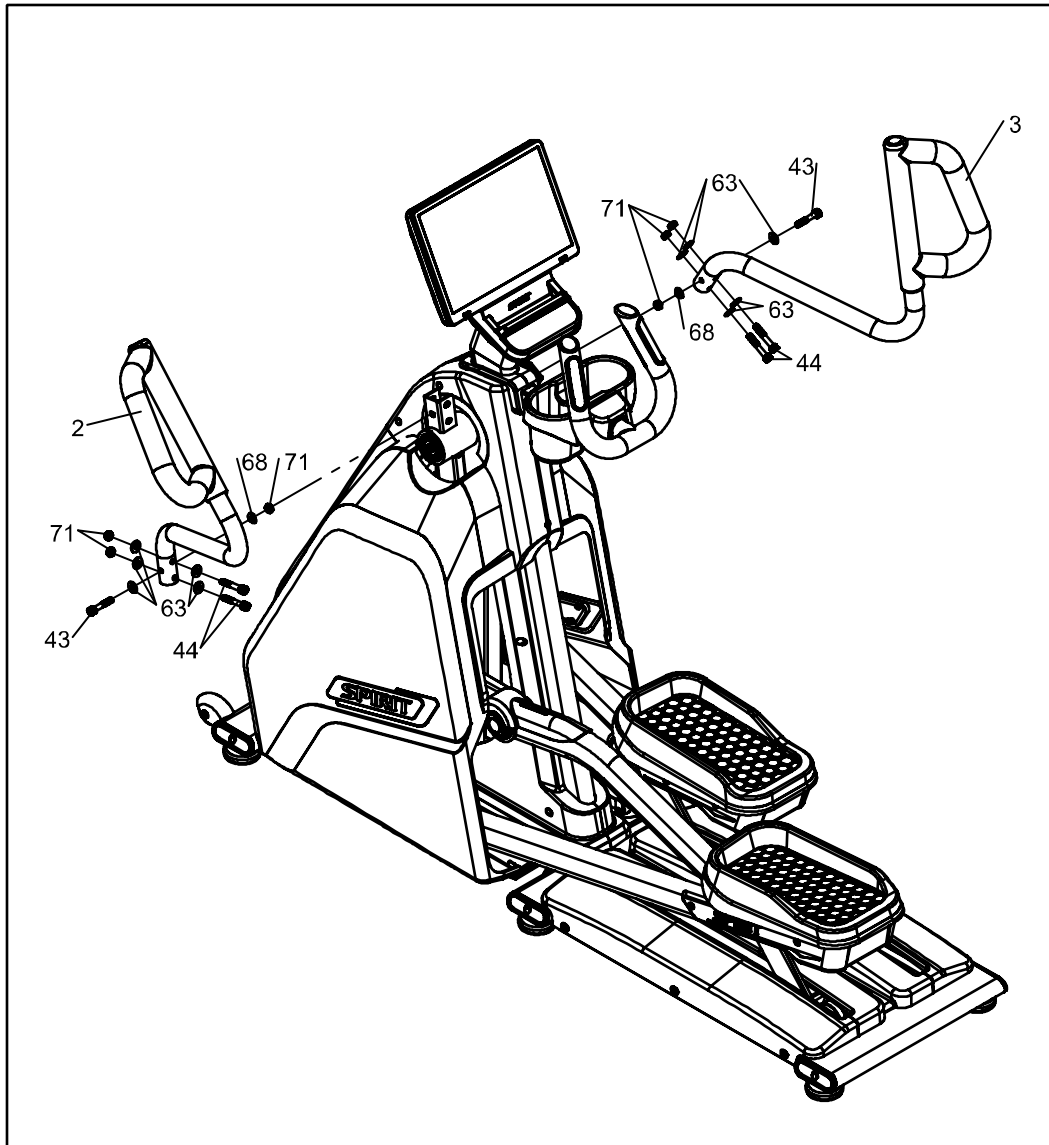
STEP 2-1

1. Take out the SCREEN PLATE (151) and use L ALLEN WRENCH (132) & M8 BOLTS (150) to screw the SCREEN PLATE (151) to the console mast.
2. Please take the HR connector & 20pin connector through the hole of the SCREEN PLATE and use PHILLIPS HEAD SCREWDRIVER (131) & M5 SCREWS (156) to screw the KEYBOARD (98) on the SCREEN PLATE (151).



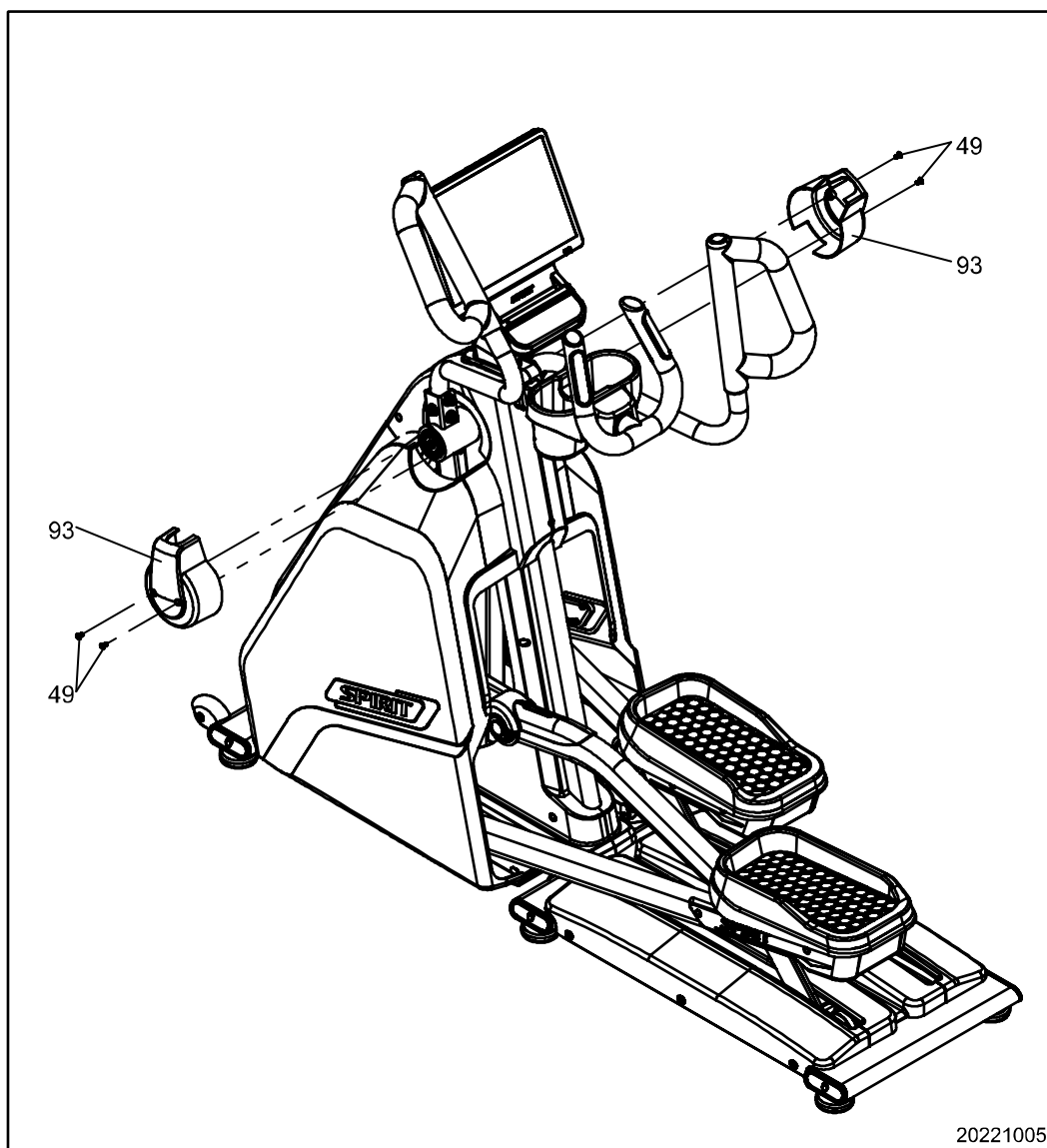
STEP 2-2

1. Install 2 SPEED NUT CLIPS (78) to LEFT CONSOLE MAST COVER (100).
2. Attach CONSOLE MAST COVERS (100 & 101) to MAIN FRAME (1) using 2 SHEET METAL SCREW (47). Use 2 SCREWS (156) to connect covers.
3. Use PHILLIPS HEAD SCREWDRIVER (131) & M5 SPEED NUT CLIPS (78) to assemble the CONSOLE MAST COVER(R) (101) with CONSOLE MAST COVER(L) (100)
4. Connect the 20-pin connector with CONSOLE (111). And Use PHILLIPS HEAD SCREWDRIVER (131) & M5 PHILLIPS HEAD SCREW (156) to screw CONSOLE (111) on SCREEN PLATE (151).
5. Use PHILLIPS HEAD SCREWDRIVER (131) & M5 PHILLIPS HEAD SCREW (156) to set up the CHIN COVER (FRONT) (91) and CHIN COVER (REAR) (92) on the console mast.



STEP 3

1. Install LEFT SIDE HANDLEBAR (2) to SWING ARM (12).
2. First install 2 longer BOLTS (44) with a WASHER (63) on both sides of SWING ARM (12) and a NUT (71). Do not tighten yet.
3. Then install 1 SHORTER BOLT (43) with a WASHER (63) through the SWING ARM (12) and HANDLEBAR (2), using a CURVED WASHER (68) and a NUT (71) on the backside.
4. Tighten after all hardware is installed.
5. Repeat the process for RIGHT SIDE HANDLEBAR (3).



STEP 4

1. Attach left SWING ARM HINGE COVER (93) to SWING ARM (12) using 4 SCREWS (49).
Repeat for the right side.

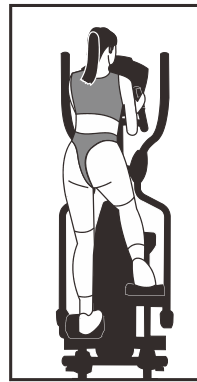
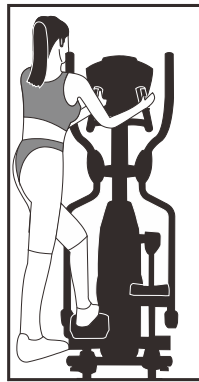
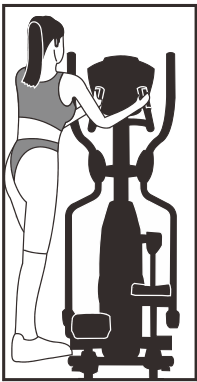
GETTING ON/OFF YOUR ELLIPTICAL

IMPORTANT

The elliptical comes with two Dual Action Handles and a Stationary Handlebar. Always hold the Stationary Handlebar when getting on and off the elliptical. First-time users should familiarize themselves with using the elliptical by using the Stationary Handlebar first and then progressing to the Dual Action Handles.

Once you have familiarized yourself with using the elliptical, you can progress to using the Dual-Action Handles to provide a total body workout. Hands can be positioned on the Dual Action Handles at the most appropriate position for your height and arm length.

1. Caution should always be taken when getting on and off an exercise machine.
2. Please follow the safety steps below.
3. Ensure the left Foot Pedal is in the lowest position and grasp the Stationary Handlebar with both hands.
4. Place your left foot on the left Foot Pedal and get secure.
5. Lift your right foot over the machine and place it on the right Foot Pedal. Get balanced and begin your workout.



Important

To get off, come to a complete stop and reverse the procedure.

Always wear rubber-soled shoes, such as tennis shoes.

It is recommended that you keep at least one hand on the Stationary Handlebar at all times, especially when getting on or off. If you are performing a walking action with your arms or doing upper body strength training exercises, ensure you are well balanced.

All equipment should be set up and operated on solid, level surfaces.

Correct Position

Your body should be in an upright position so that your back is straight. Keep your head up to minimize neck and upper back strain.

Always try and use the elliptical in a rhythmical and smooth motion. If you find yourself feeling uncomfortable or experiencing a surging type of feeling, there is probably too much tension.

The elliptical can be used in forward or reverse motion.

When going in reverse, bend your knees slightly more. More emphasis is on the buttocks and hamstrings in the reverse motion.

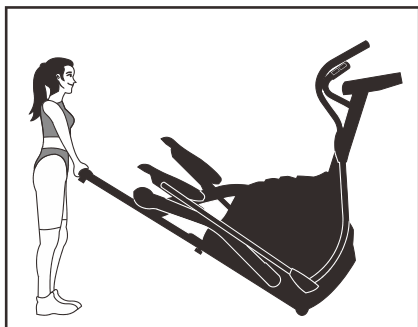


MOVING YOUR ELLIPTICAL

The elliptical can be easily moved from room to room.



1. Move to the rear of the machine and ensure swing arms are even. Squat down, then grasp the handle of the rear Stabilizer.



2. Lift up with legs to transport elliptical.

CONSOLE OPERATION



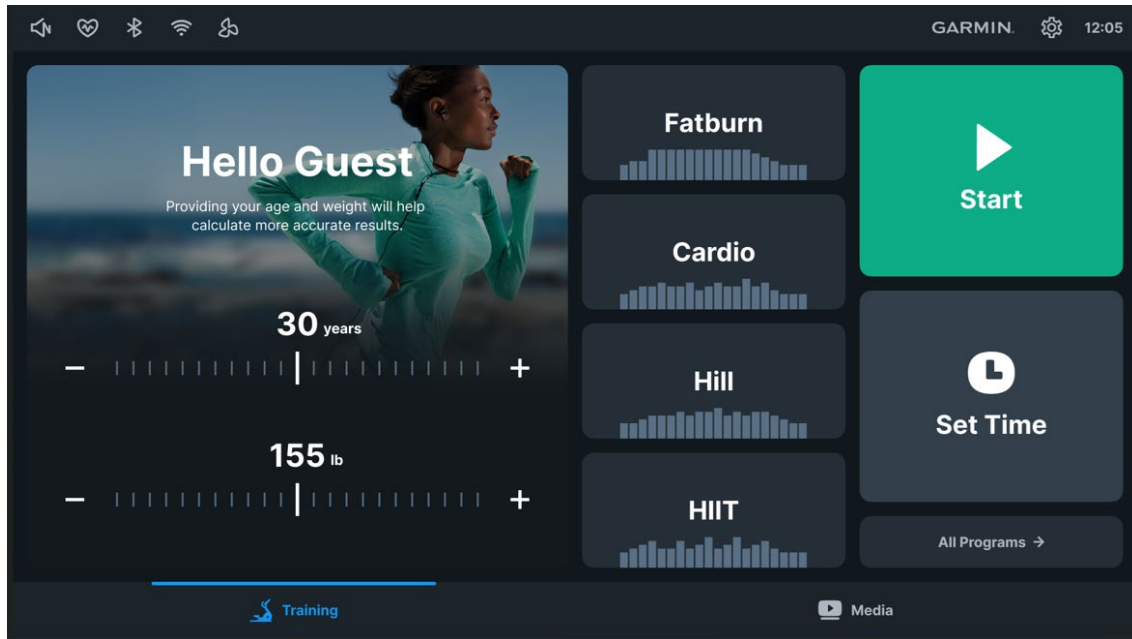
Starting the operation

- Plug in the power cord at the front of the unit.
- When the power cord is plugged in the screen will show the initial image and then enter the ready mode which is the beginning of the operation.
- Main Home page: Begin operation by touching the icons.
- Quick operating buttons are convenient for basic functions.



STARTING OPERATION

When the power is turned ON, the screen will show a brief loading screen and then display the Home Screen which indicates that the machine is ready to operate.



Home Screen: Begin operation by touching the icons.

FUNCTIONS OF THIS ELLIPTICAL

The Touchscreen is used for operating all functions. You can directly touch any button on the screen or through the physical buttons below the console to control functions. On the lower portion of the console there is the Start button to begin the workout, Stop button to pause/stop programs, Level button to change workload.

QUICK START

This is the quickest way to start a workout. After the console powers up you just press the Start button to begin. This will initiate the Quick Start mode. In Quick Start the Time will count up from zero, all workout data will start to accrue and the workload may be adjusted manually by pressing on the screen or the Up and Down buttons on lower control panel.

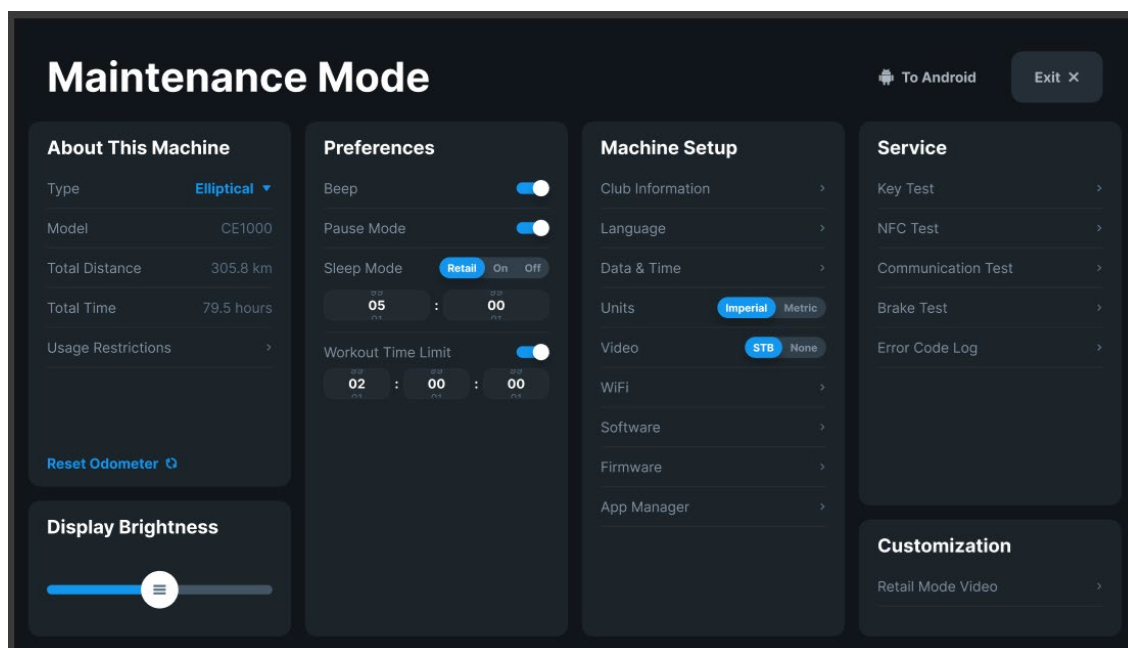
HEART RATE FEATURE

The Pulse (Heart Rate) on the screen shows the current value of the heart beats per minute. You must use both left and right stainless steel sensors to pick up your pulse. Pulse values are displayed anytime the computer is receiving a signal from the hand pulse sensors. You may use the hand pulse sensors while in Heart Rate Control. The CE1000 will also pick up wireless heart rate transmitters that are Polar and Bluetooth compatible.

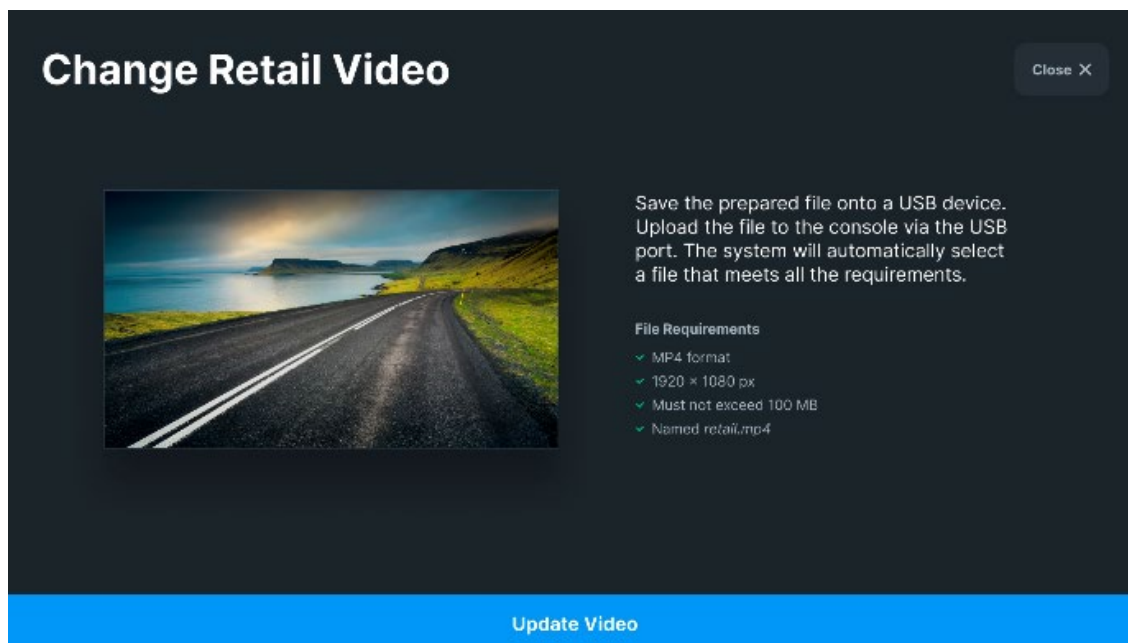
TOUCHSCREEN OPERATION

Maintenance Mode

Enter the maintenance mode from the Home page by pressing “**Hello Guest**” 10 times to access the machine information, various settings and service procedures.

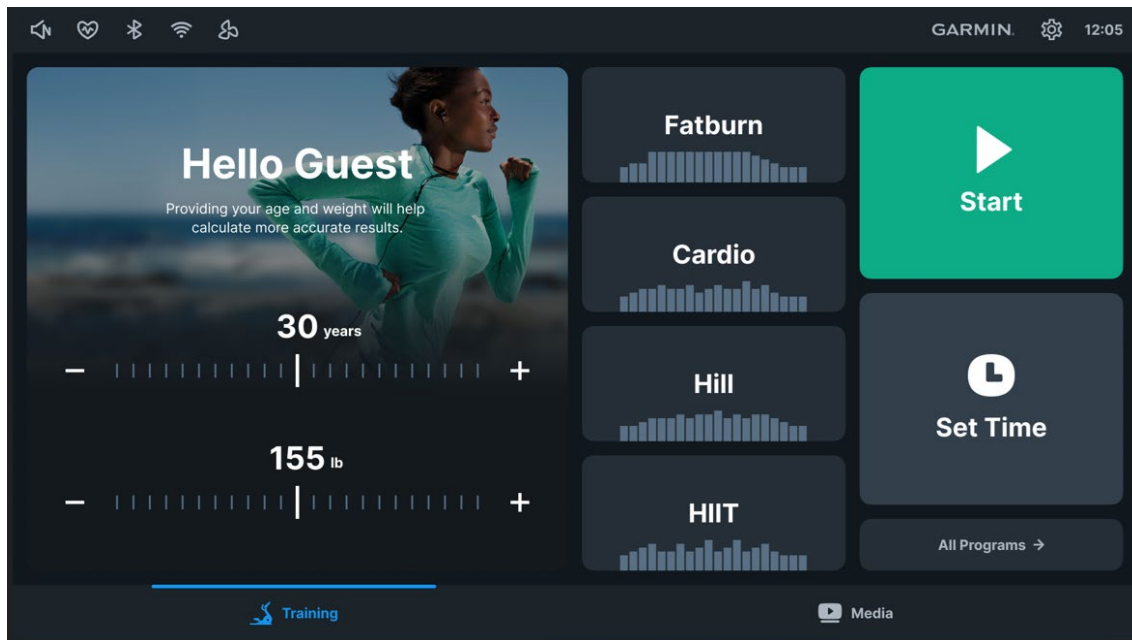


In the maintenance mode, you can upload your own visual materials via USB. Select **Retail Mode Video** under the **Customization** tab and follow the guidelines to change the videos when the console enters Retail Mode.



Basic Operation & Home Page


The console interface is divided into two main sections: **Training** and **Media**. **Training** section is focused on workout data and controls, while **Media** offers various entertainment options for an exercising user. Use the tab bar on the bottom of the screen to switch between the two sections before, during or after the workout.



Training section's main screen includes a ranking list and some of the most common workout choices, such as immediate start, a timed workout, or popular workout patterns. A workout can be started by either pressing **Start** button on the screen, or using the physical **Start** key on the console.


Various tools and settings are available in the status bar on the top of the screen:

 press the **WiFi** icon to open WiFi settings

 press the **Gear** icon to change language or units of measurement

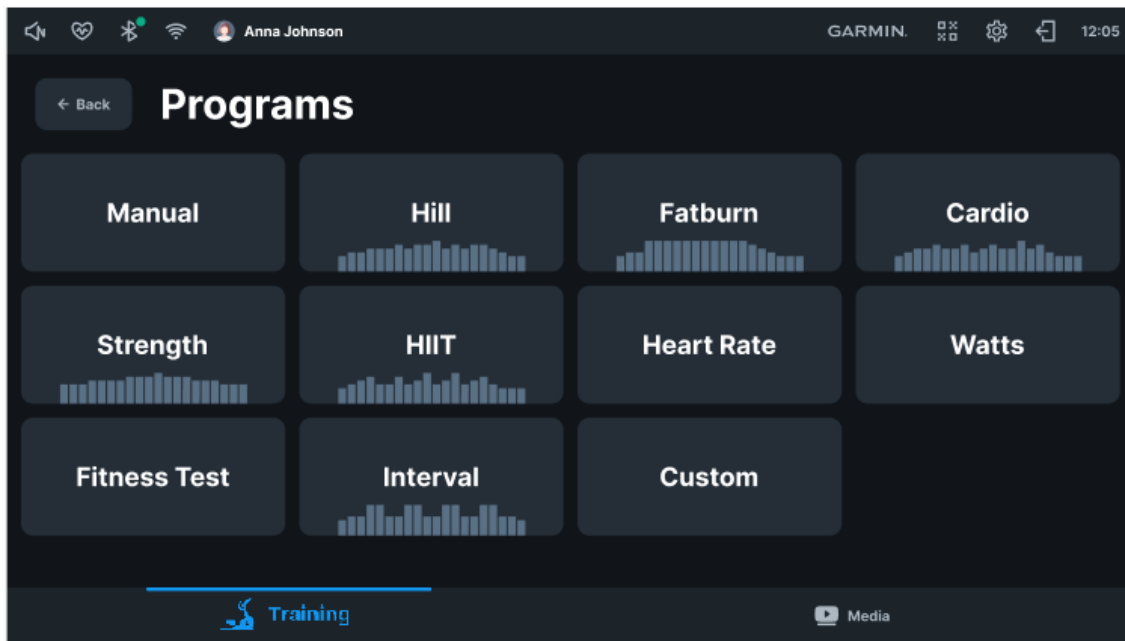
 to pair a Garmin device, press on the **Garmin logo** (see details in **Garmin Pairing**)

 to pair a Bluetooth device, press on the **Bluetooth** icon

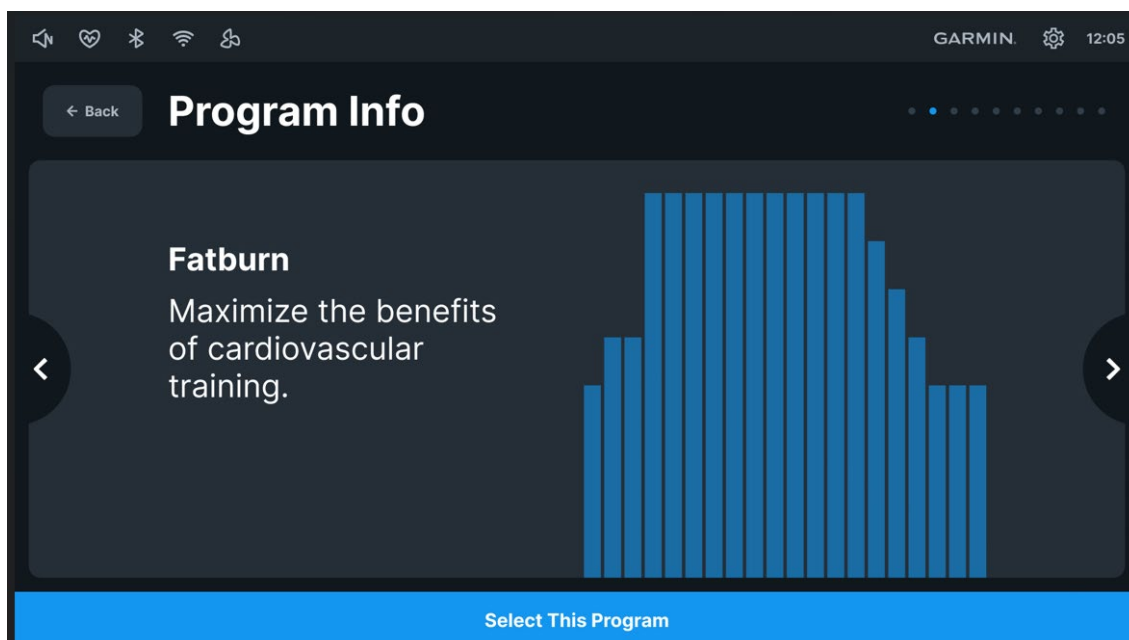
 to pair a heart rate measuring device, select the **Heart Rate** icon;

Programs

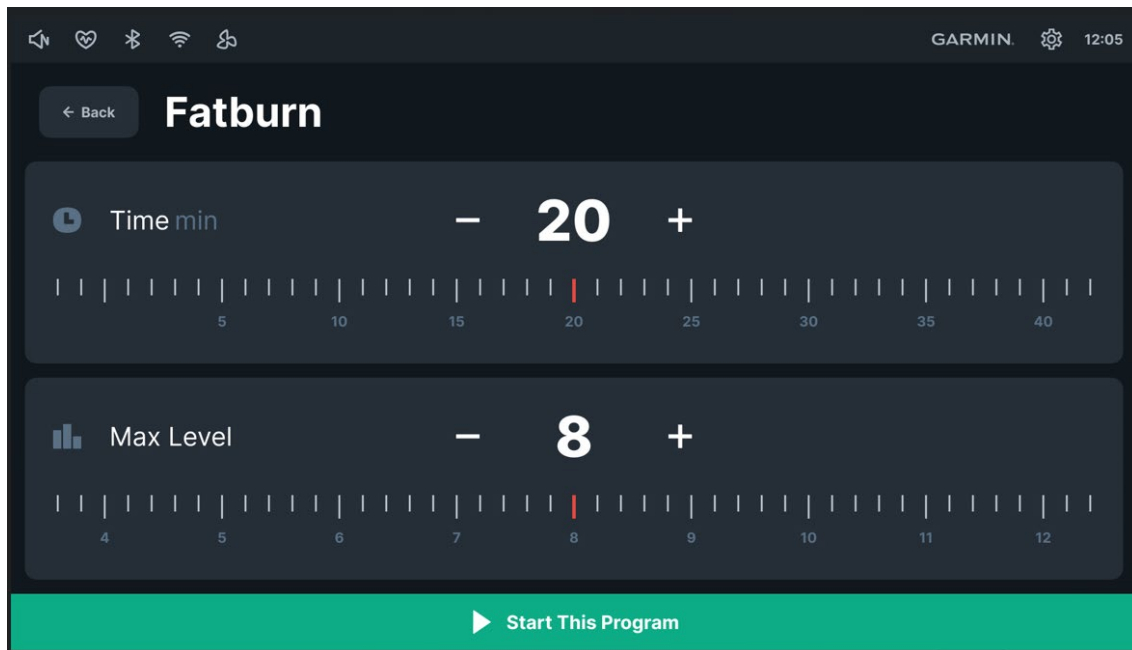
Press **All Programs** on the home page to open a full selection of the preset programs.



Tap on a program to learn more about it in the **Preview Mode**. Here, switch between programs easily by sliding left and right, or by using the arrow icons on both sides of the screen. Tap on the program card once again to enter the **Program Setup** page.



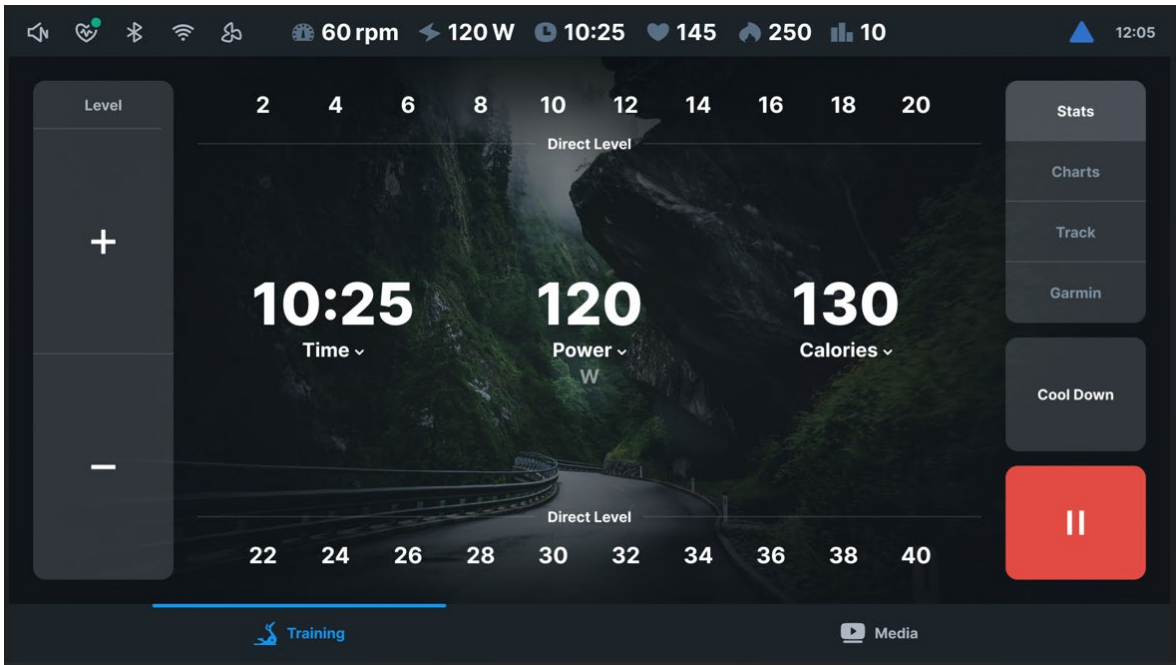
Program Setup page allows users to customize their workout. To change the value, drag the scale, use **Plus & Minus** buttons, or tap on the number for direct input. Different programs offer different parameters to adjust.



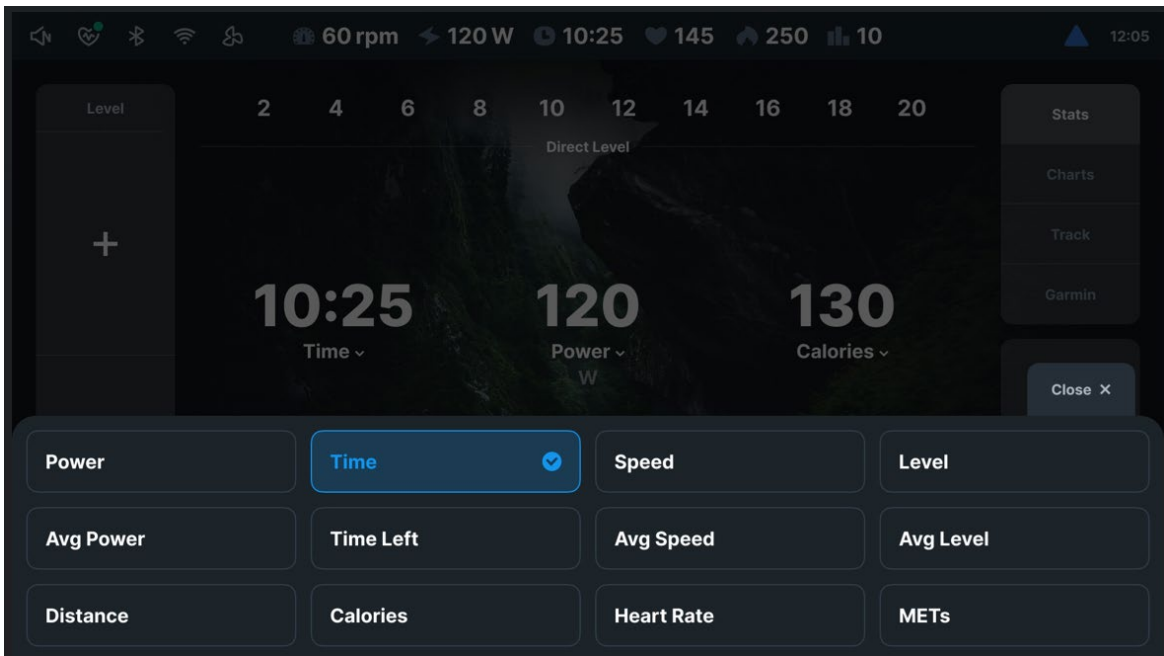
Press **Start This Program** button to start the workout with selected parameters. Press **Back** to return to program selection.

Workout Mode

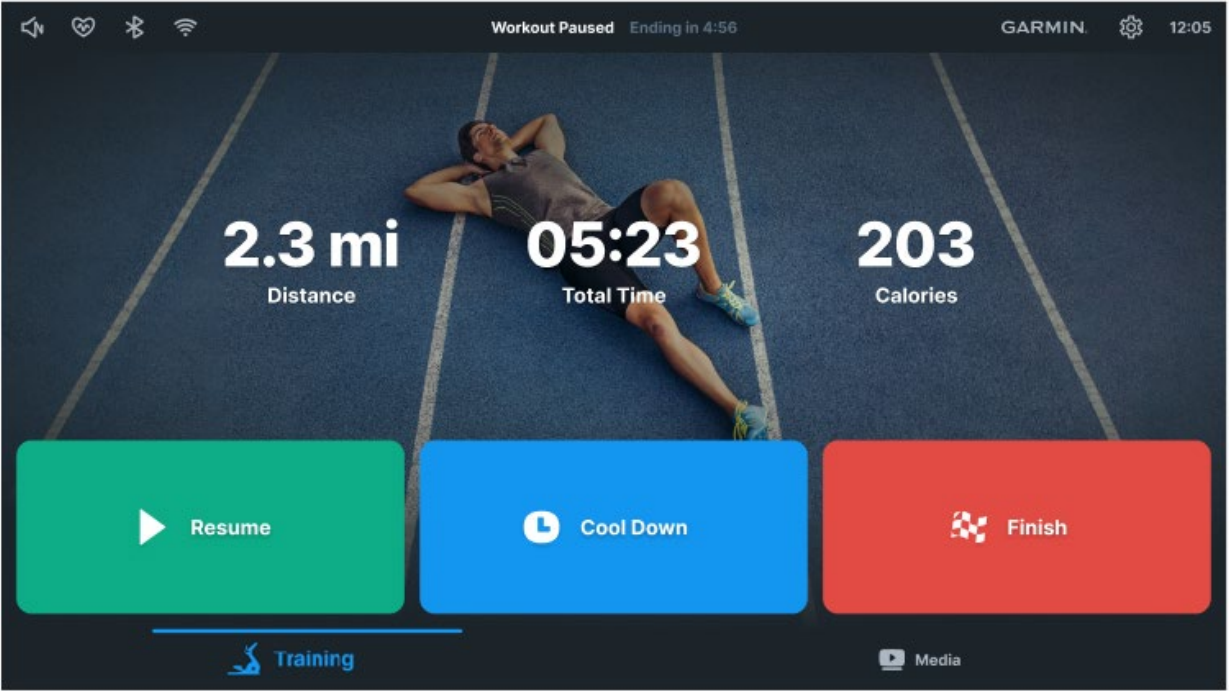
Start exercising once the console is in the workout mode and the time has started counting. Use panels on the left and right sides of the screen to control the **level**. Choose between three workout views (Stats, Charts and Track), or go to the Media section for entertainment content. While in the Media section, please use physical keys to control the **level**.



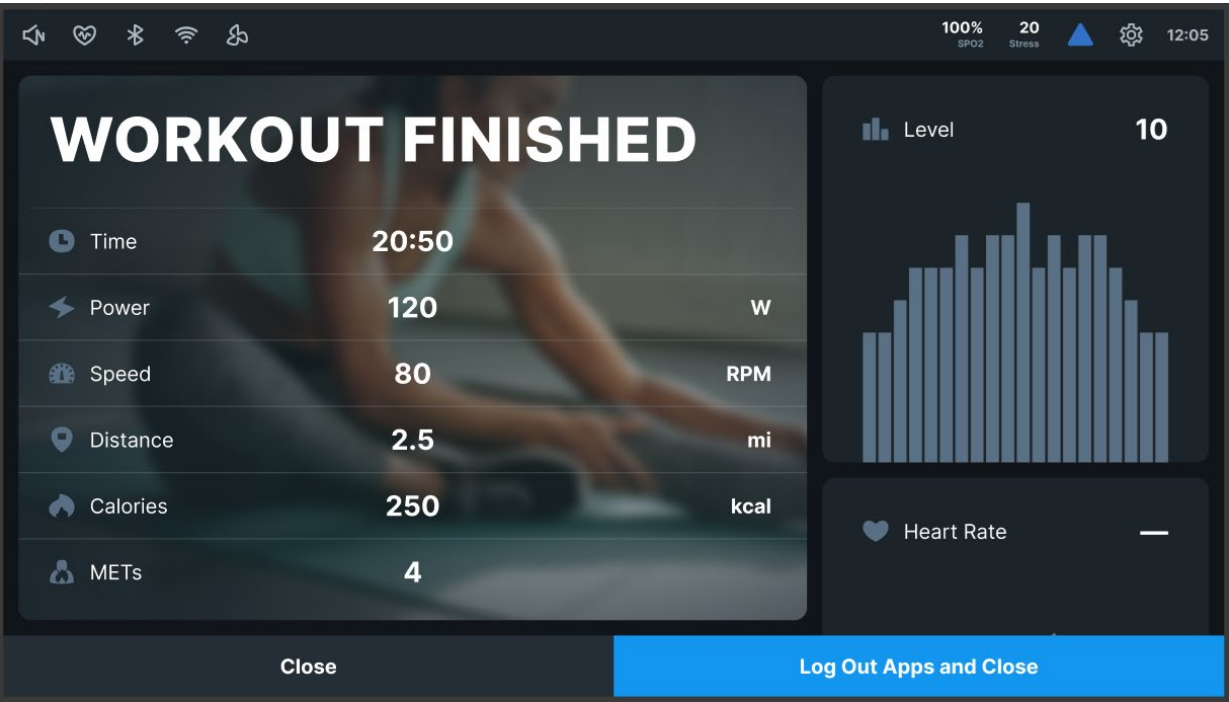
Parameters displayed in the **Stats** view can be customized: press on the number and select your preferred option.



To finish your workout, press the physical **STOP** button on the console twice, or tap on the **Pause** icon in the bottom right corner of the workout screen, then press **Finish**.

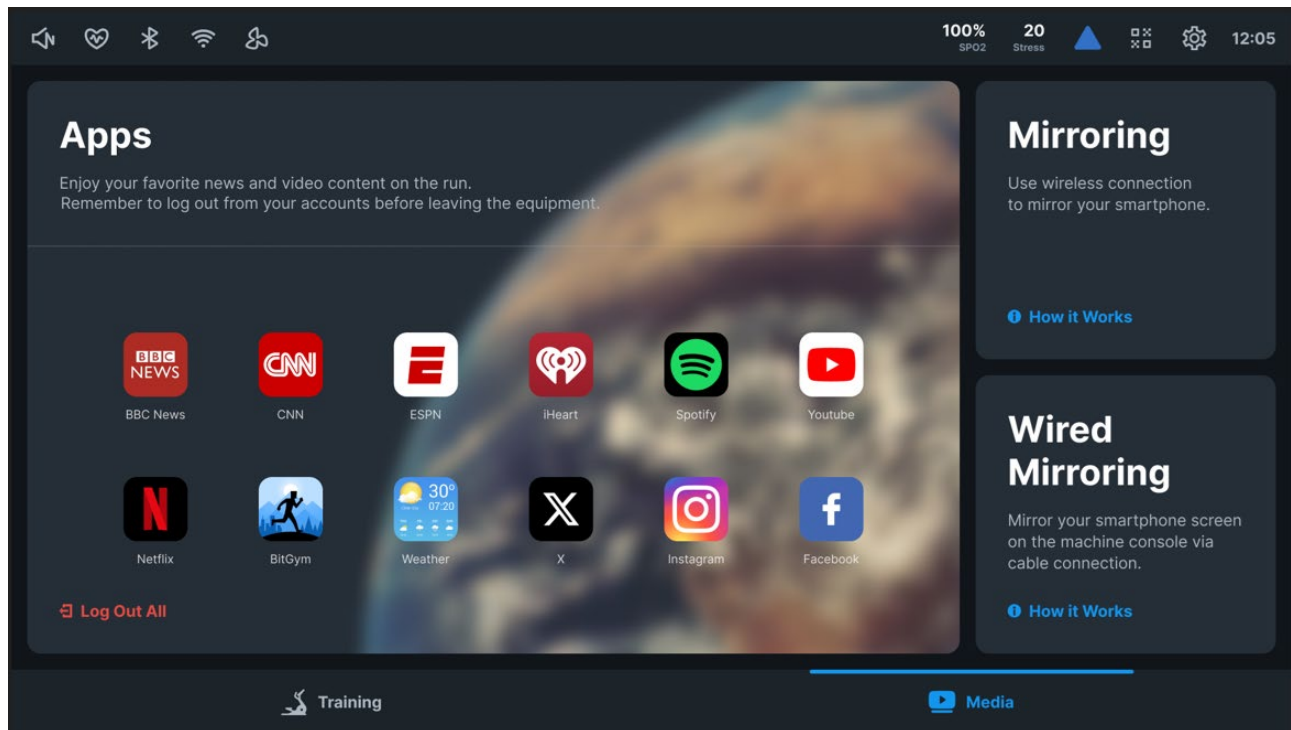


When the workout is over, the workout summary will pop up. Slide up & down on the right side of the screen to see all available charts.



Media

Press on the **Media** tab at the bottom of the screen to access various apps, television, and casting from your smartphone. A stable internet connection is required for all of the above.




To open an app, tap on its icon. Select from news, video and other content. Users do not have to log out when they have finished their workout: it happens automatically. Remember to check for updates regularly: access **Maintenance Mode / App Manager** for managing all third-party apps.

Customers are allowed to choose either **Mirroring** to transfer their own entertaining content from their smartphones to the console screen. To get familiar with the procedure, press **How It Works** and follow the instructions provided on the screen.

How to Screen Mirror Close X

Step 1

Scan the QR code to join the network:



... or open WiFi settings on your phone to connect manually:

ID


EZCastCS-xxxxxxx

Password

xxxxxxx


Step 2

On your phone, run the Screen Mirroring function (the name may vary depending on your phone's operating system) and select the same network to start mirroring.



For Android Users

If you have no built-in mirroring function on your phone, please scan the QR code below to download the EZCast app and join the network through the app.



How to Use Wired Mirroring Close X

iPhone

Use a Lightning to HDMI adapter and an HDMI cable to connect your phone to the machine console.

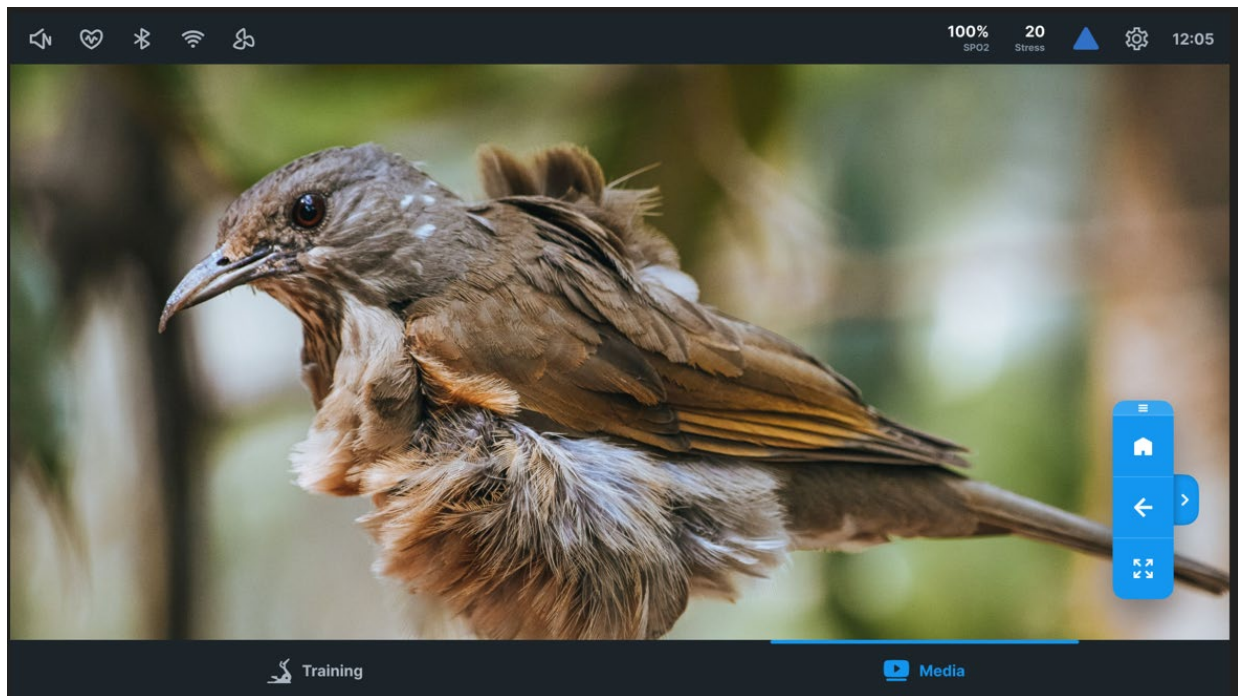
Android Phone

Use a USB-C to HDMI adapter and an HDMI cable, or a direct USB-C to HDMI cable to connect your phone to the machine console. Make sure your Android smartphone supports video output over USB-C.

The HDMI port is located in the right corner of the machine console's underside.

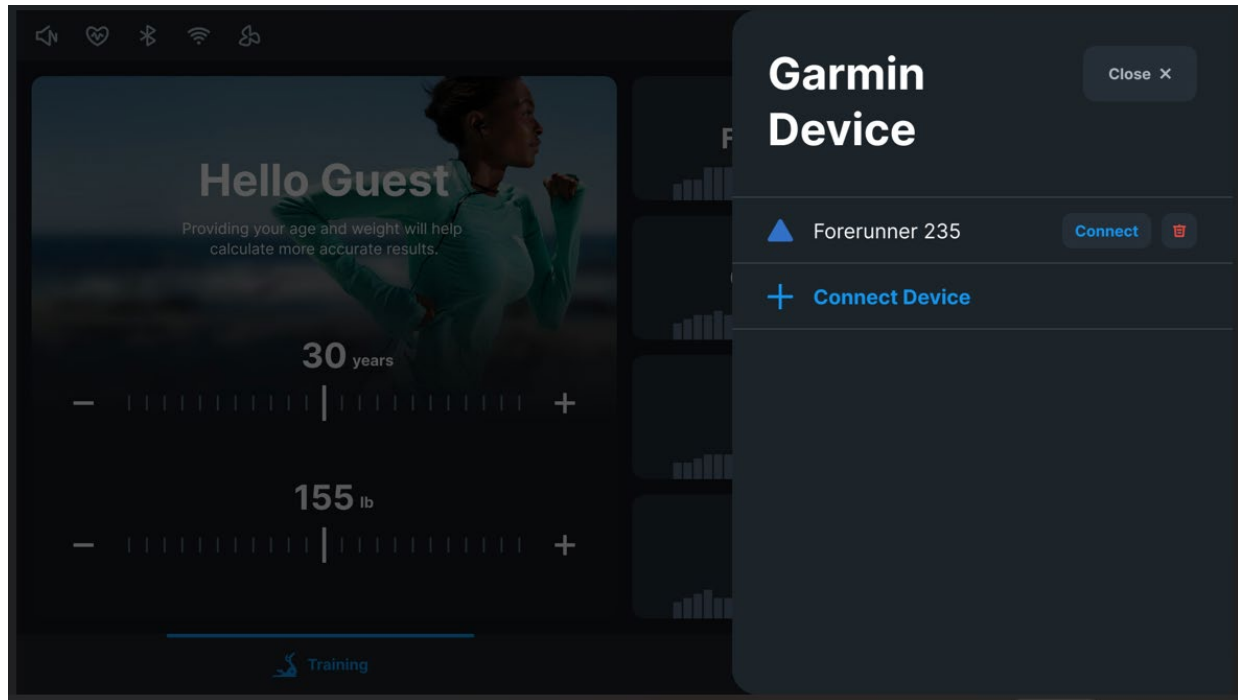


Once the content is on, use the **Floating Panel** to navigate and pause your workout when needed. Touch the panel's top edge and drag the panel around the screen to find the perfect place for it, where it will not prevent you from interacting with the content. Press **Hide Panels** to enter the full-screen mode without stats on the top and tabs on the bottom, and Show Panels to bring them back. Use the arrow button on the right side of the panel to hide & show the text labels: it allows to further minimize the panel's size. Press **All Media** to go back to the content sources selection.

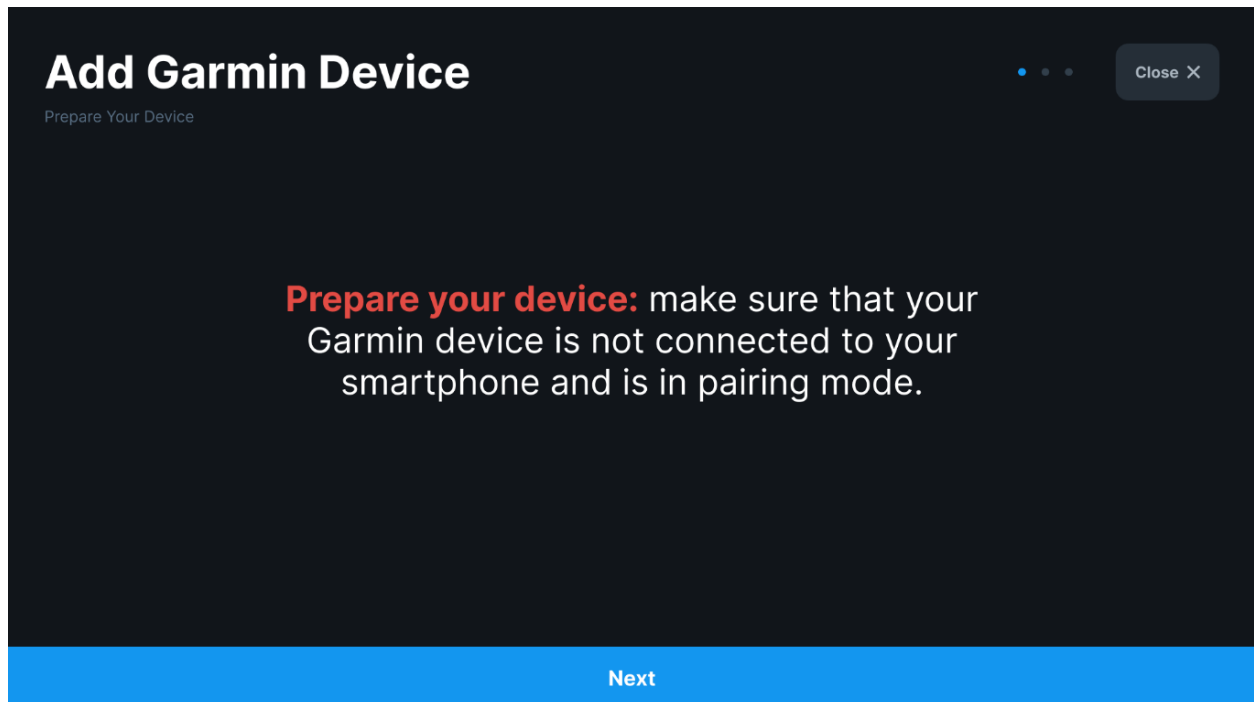


Garmin Pairing

To connect to a Garmin device, one must first pair it with the console. Press on **Garmin Logo** in the status bar, then **Connect Device** button to run the pairing flow.



Step by step, follow the instructions provided on the screen: switch your Garmin device into pairing mode, then select it on the console screen and input the pin code displayed on your device.



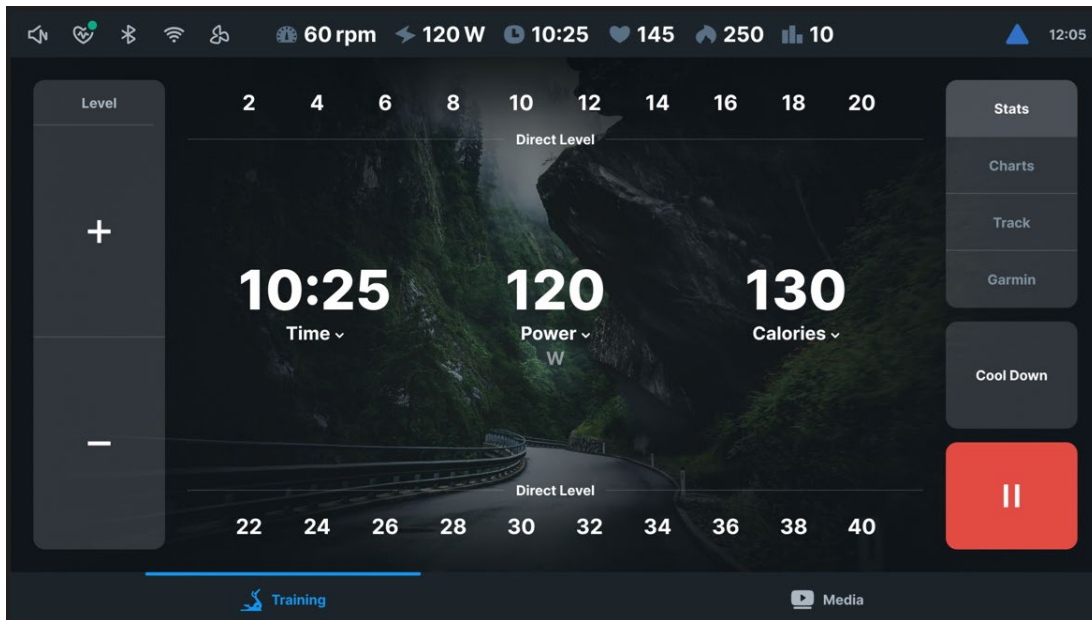
EXERCISE PROGRAM

CHANGING THE WORKOUT DISPLAY

During your workout, you may change the display based on the view that works best for your needs. Once your workout begins, you will see 3 preset views available at the bottom of the screen: **Stats**, **Charts**, and **Track**.

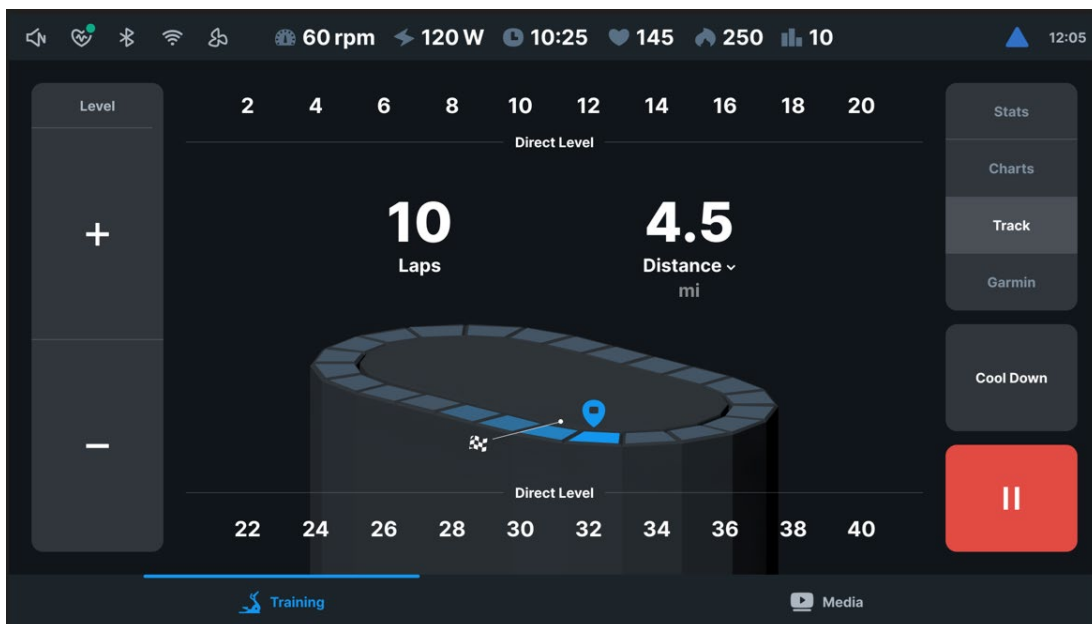
Stats

To switch the display to **Stats** view, simply tap the **Stats** button on the top side of the central screen. This view shows an overview of the real-time workout data including the Elapsed Time, Total Distance, Average Pace and other workout data.



TRACK

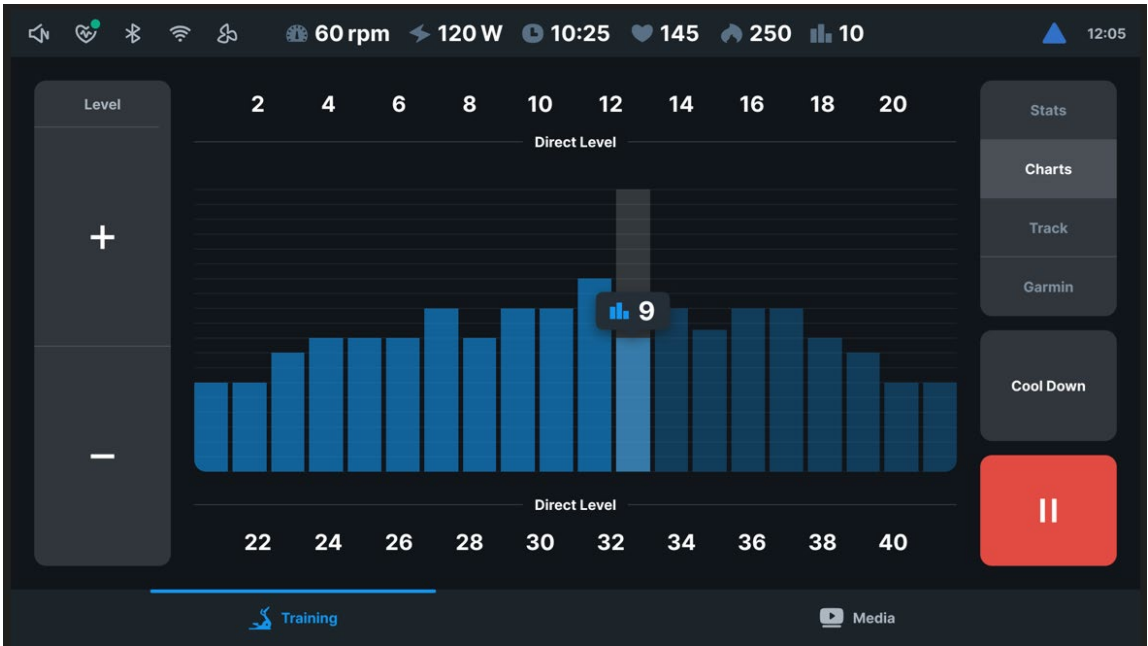
To switch the display to **Track** view, simply tap the **Track** button on the top of the central screen. This view shows a virtual track that corresponds with the current workout, as well as the total **Distance**, number of **Laps**, and other workout data.



EXERCISE PROGRAM

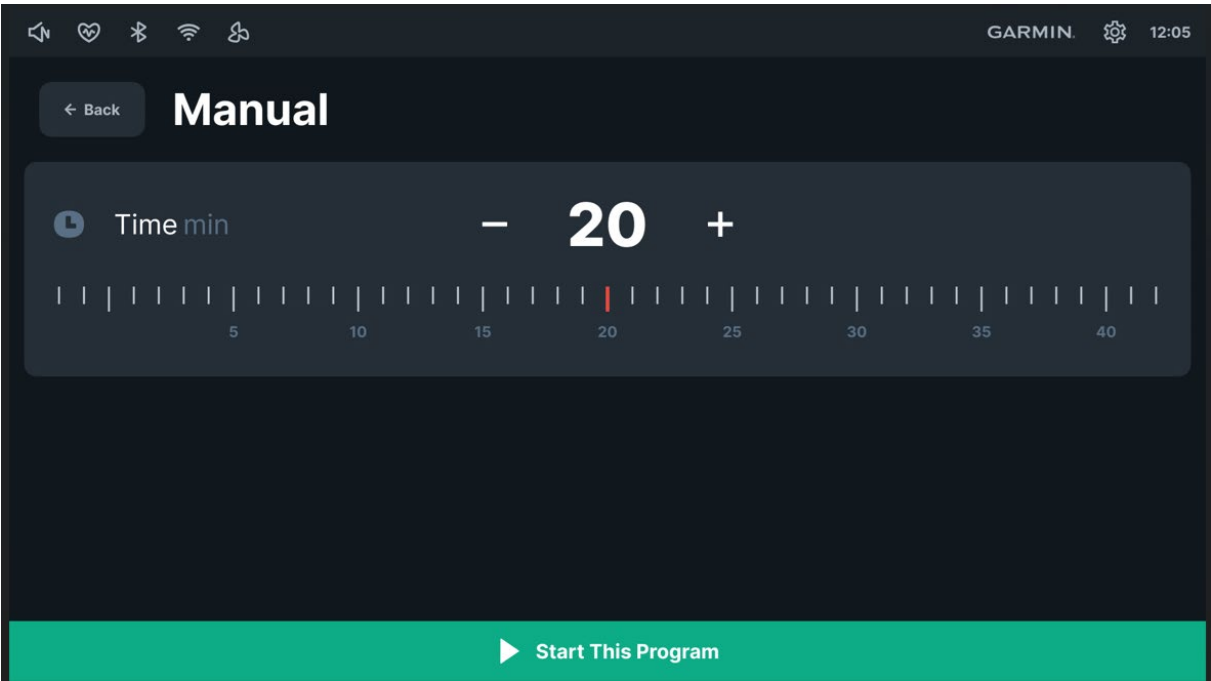
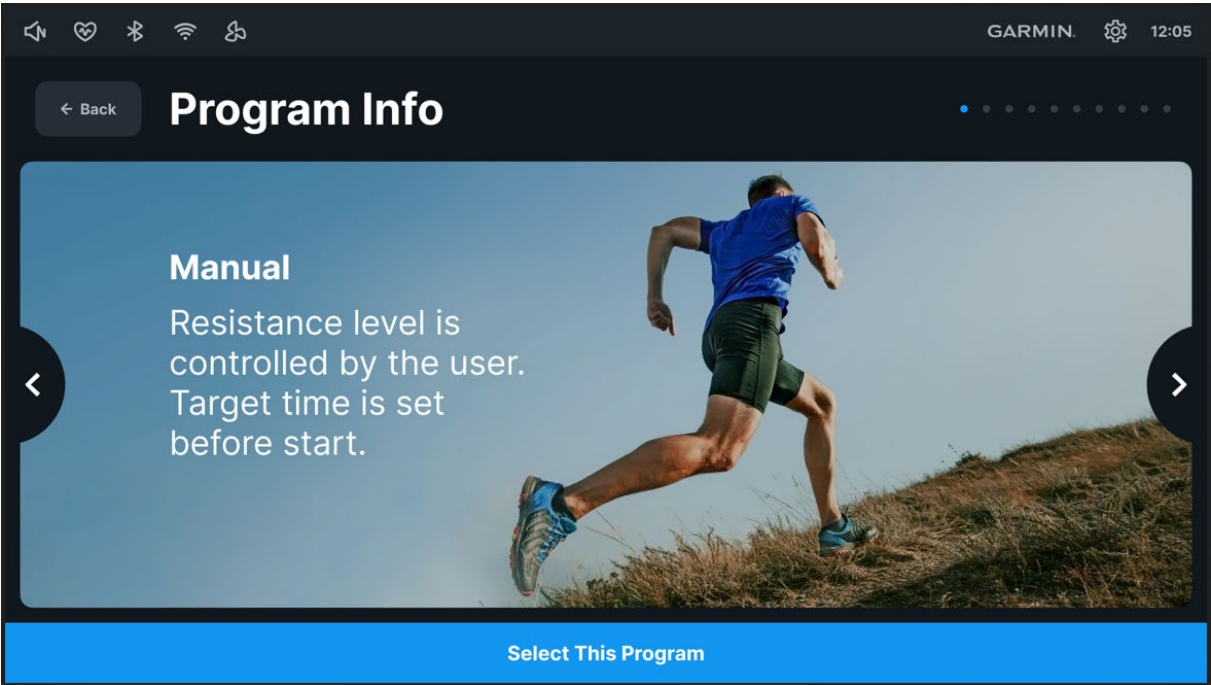
Charts

To switch the display to **Charts** view, simply tap the **Charts** button on the top of the central screen. This view shows the resistance level profile during the current workout.



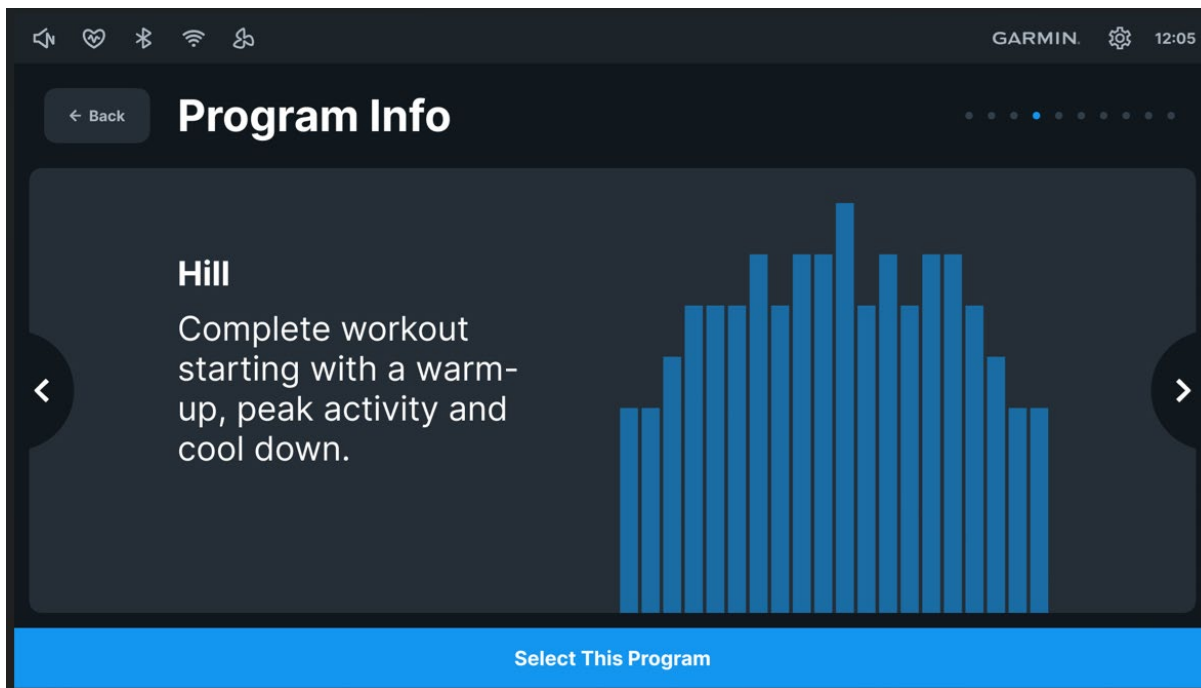
MANUAL

The level of resistance is controlled by the user. Increase or decrease levels at any time during your workout.



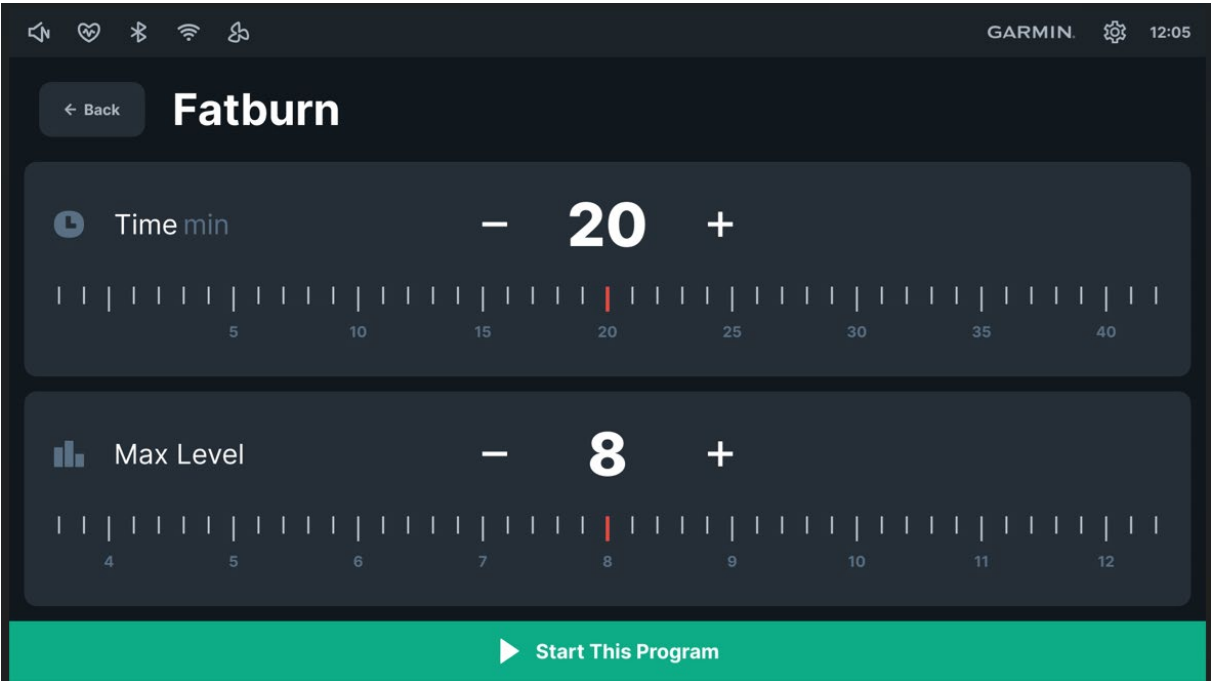
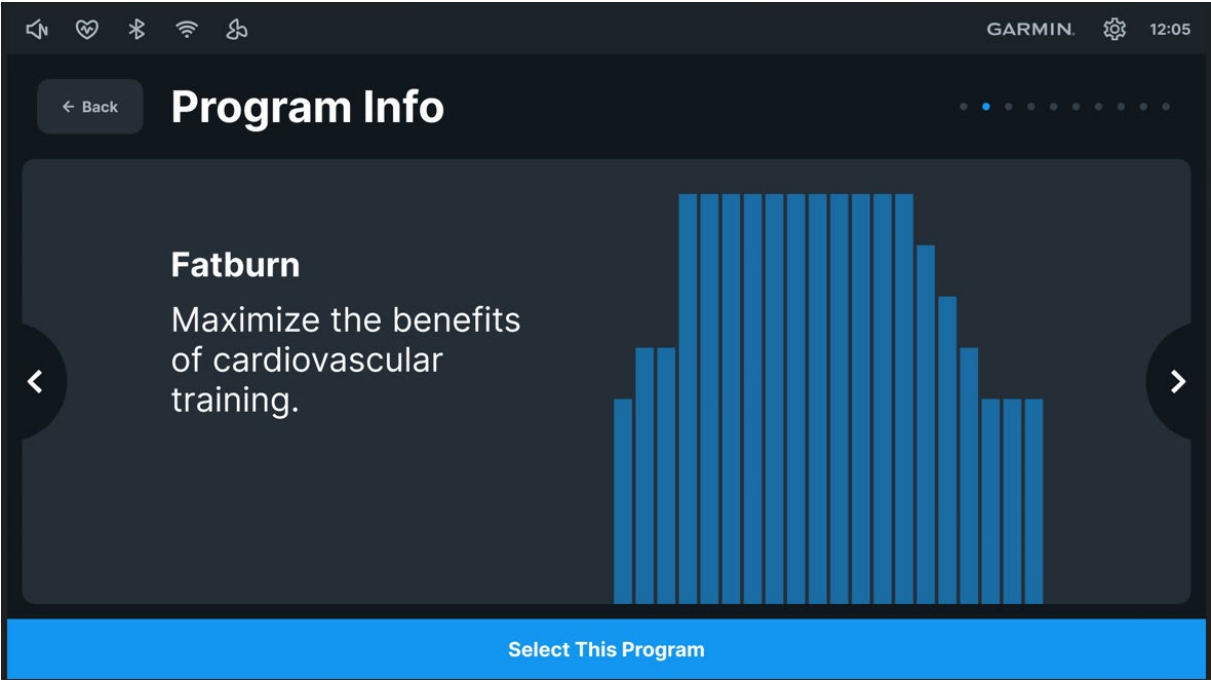
HILL

This program follows a triangle or pyramid type of gradual progression from approximately 10% of maximum effort (the level that you chose before starting this program) up to a maximum effort which lasts for 10% of the total workout time, then a gradual regression of resistance back to approximately 10% of maximum effort.



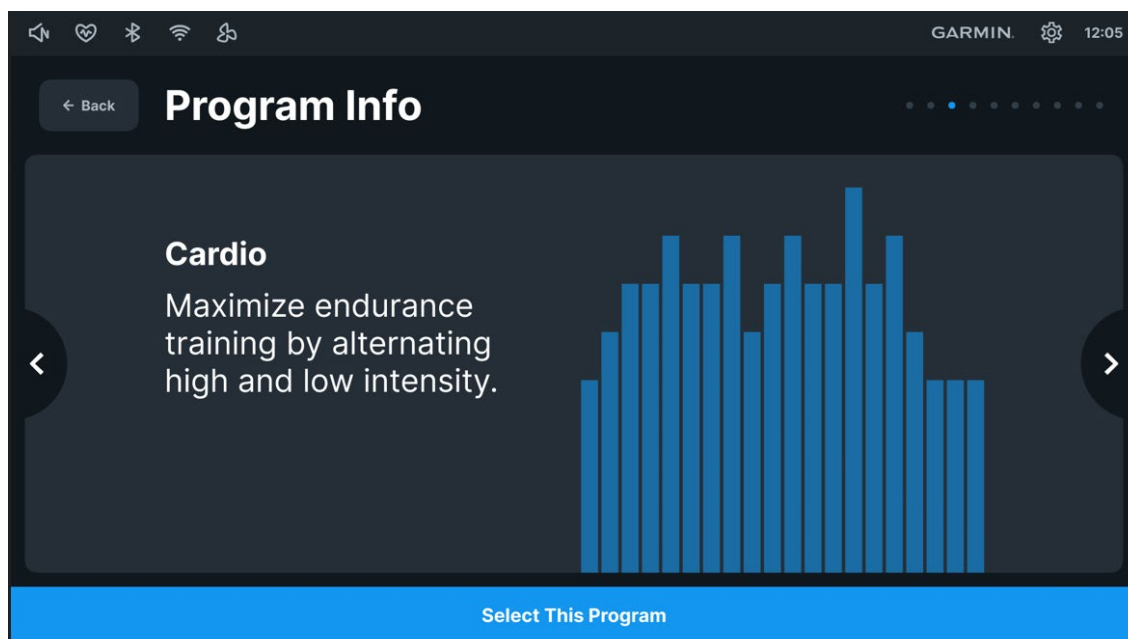
FAT BURN

This program follows a quick progression up to the maximum resistance level (default or user input level) that is sustained for 2/3 of the workout. This program will challenge your ability to sustain your energy output for an extended period of time.



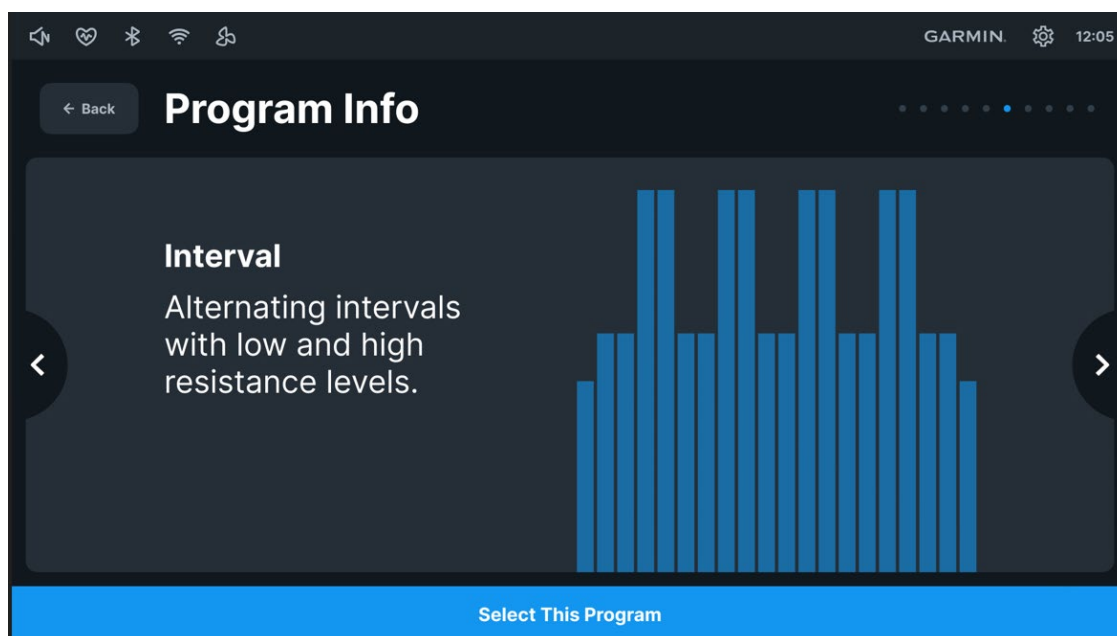
CARDIO

This program presents a quick progression up to near maximum resistance level (default or user input level). It has slight fluctuations up and down to allow your heart rate to elevate and then recover repeatedly before beginning a quick cool down. This will build up your heart muscle and increase blood flow and lung capacity.



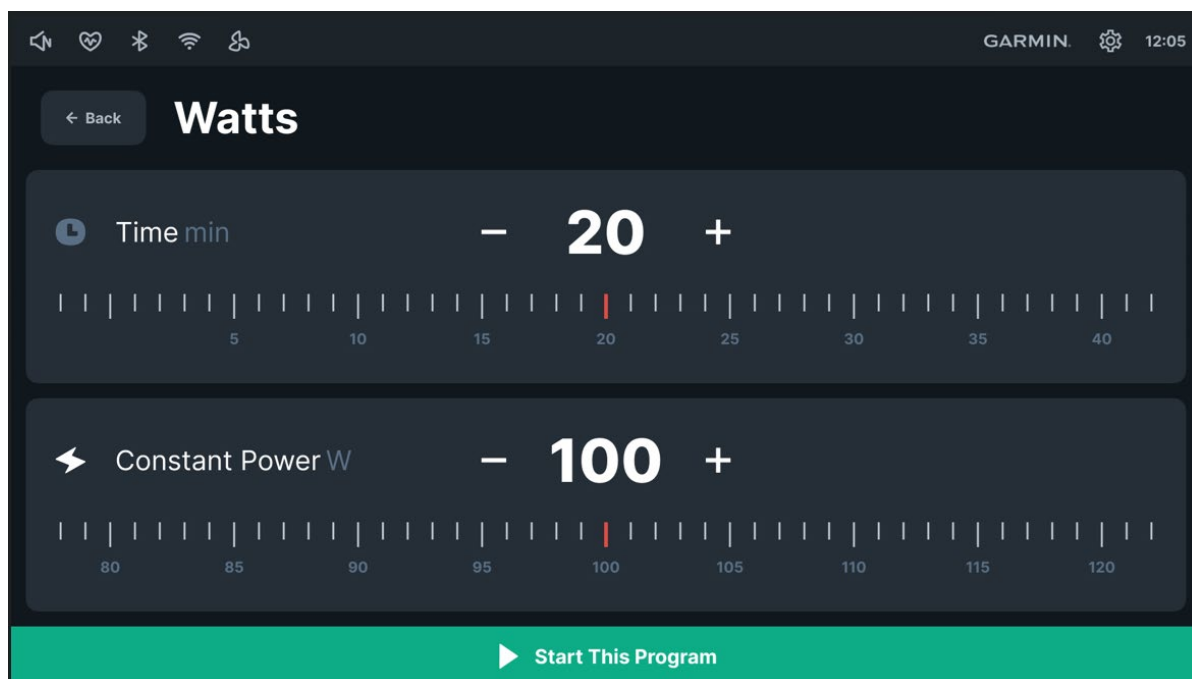
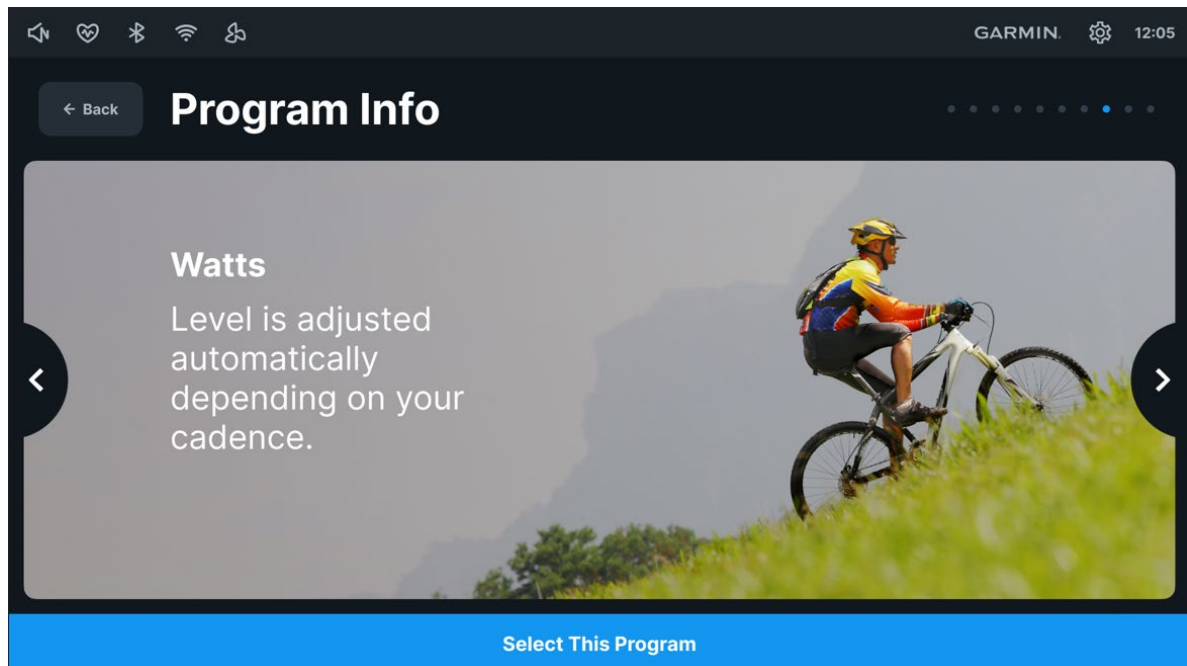
INTERVAL

This program takes you through high levels of intensity followed by recovery periods of low intensity. This program utilizes and develops your fast twitch muscle fibers, which are used when performing tasks that are intense and short in duration. These deplete your oxygen level and spike your heart rate, followed by periods of recovery and heart rate drop to replenish oxygen. Your cardiovascular system gets programmed to use oxygen more efficiently.



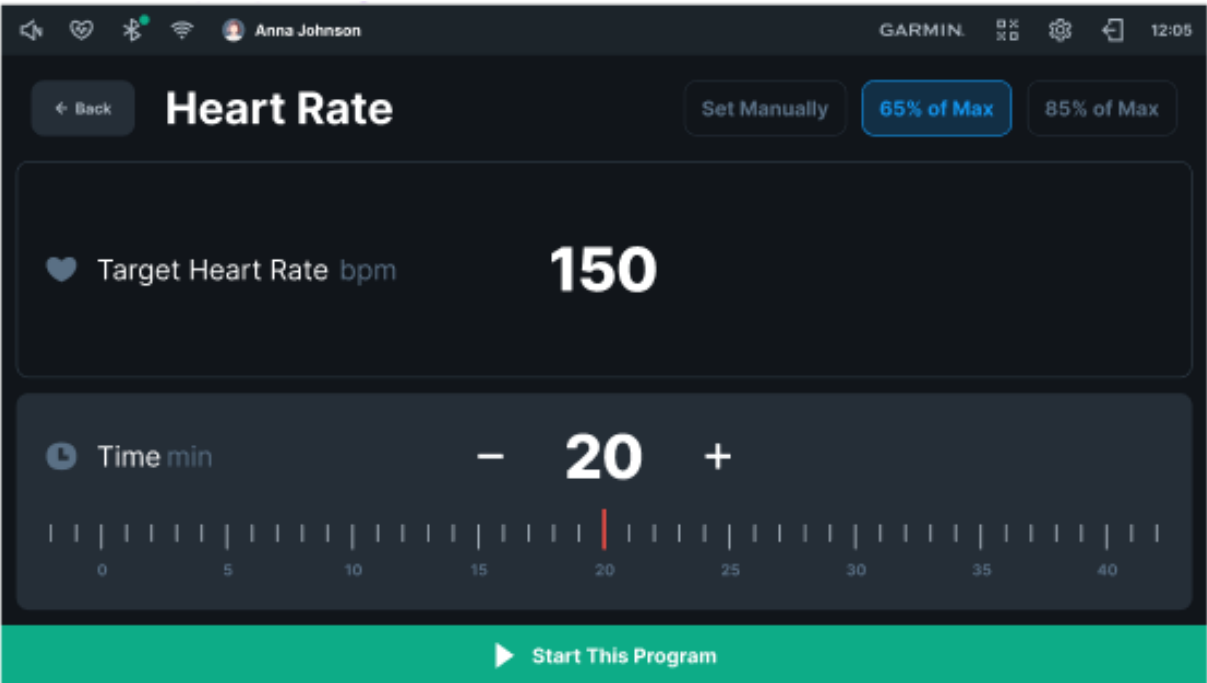
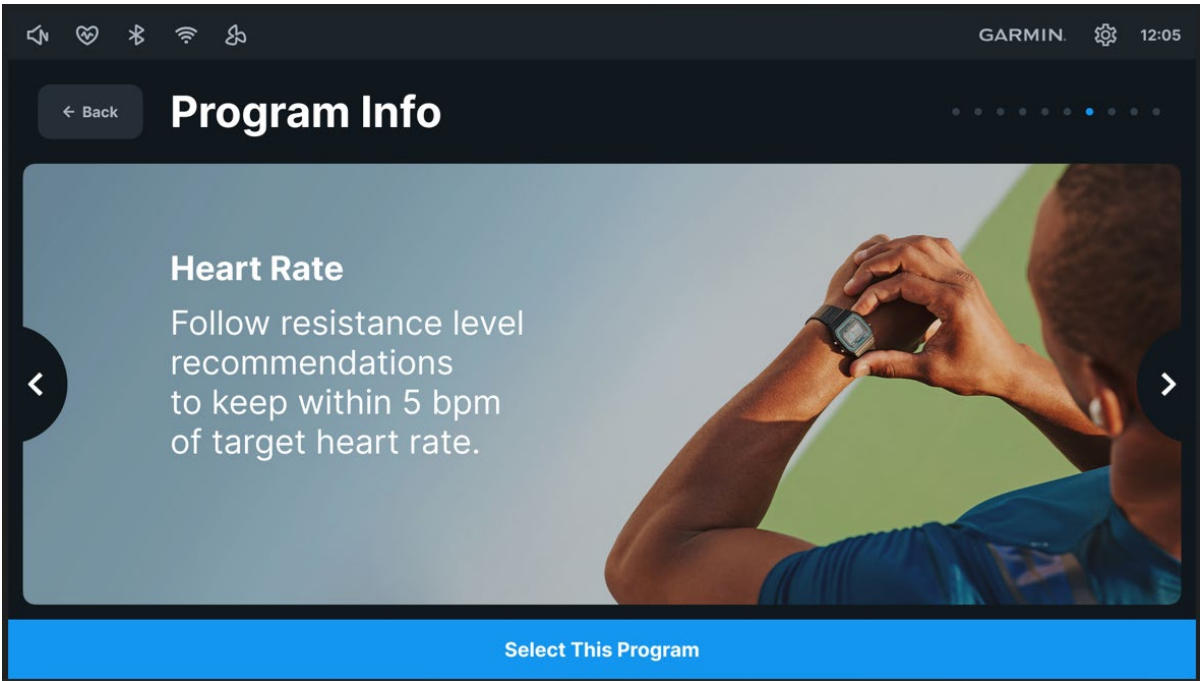
WATTS

A watts program is a controllable constant power whose level adjusts when the speed is changed. Choose either faster pedaling at a lower resistance level or slower pedaling at a higher resistance level.



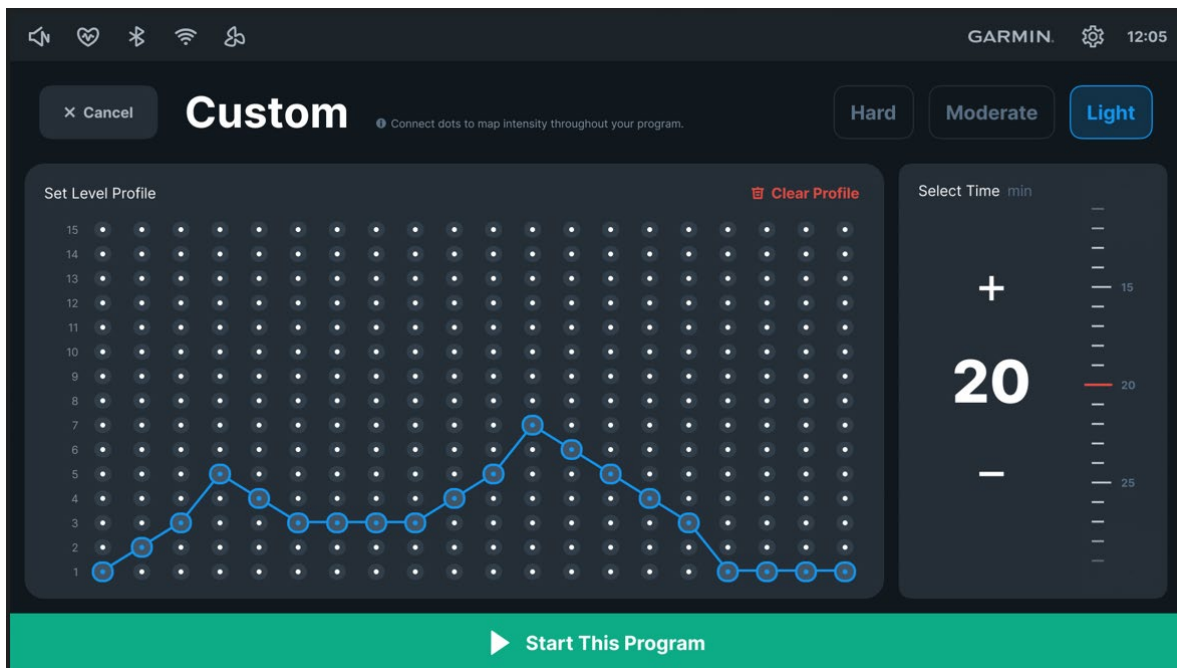
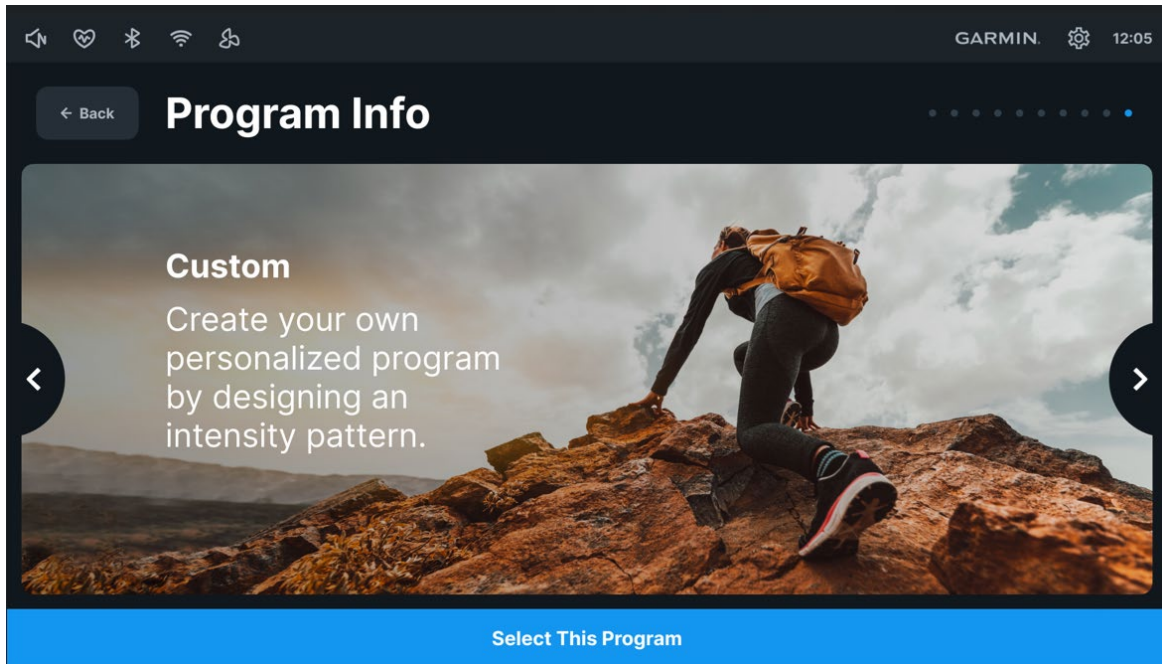
HEART RATE

The default value is 65% of your projected rate maximum. You have the option of changing your target heart rate. The machine will attempt to keep you within five beats of your target heart rate.



CUSTOM

You will create the desired resistance levels for each of the 20 segments of the program using the keyboard on the screen. You may change these levels at any time during the workout.

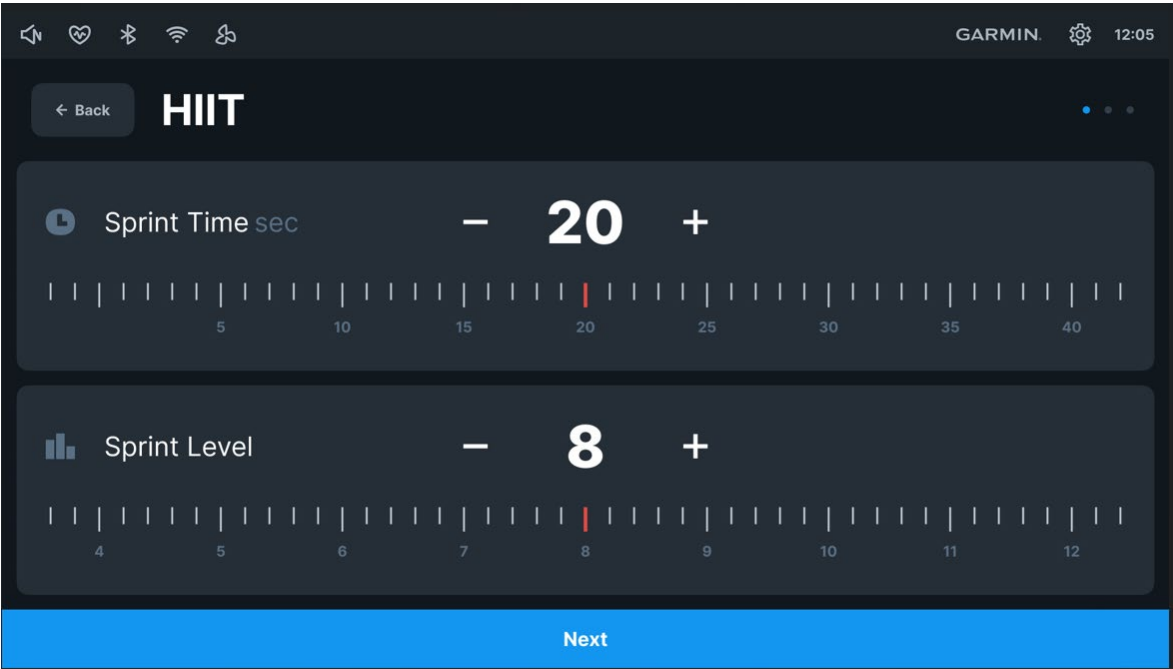
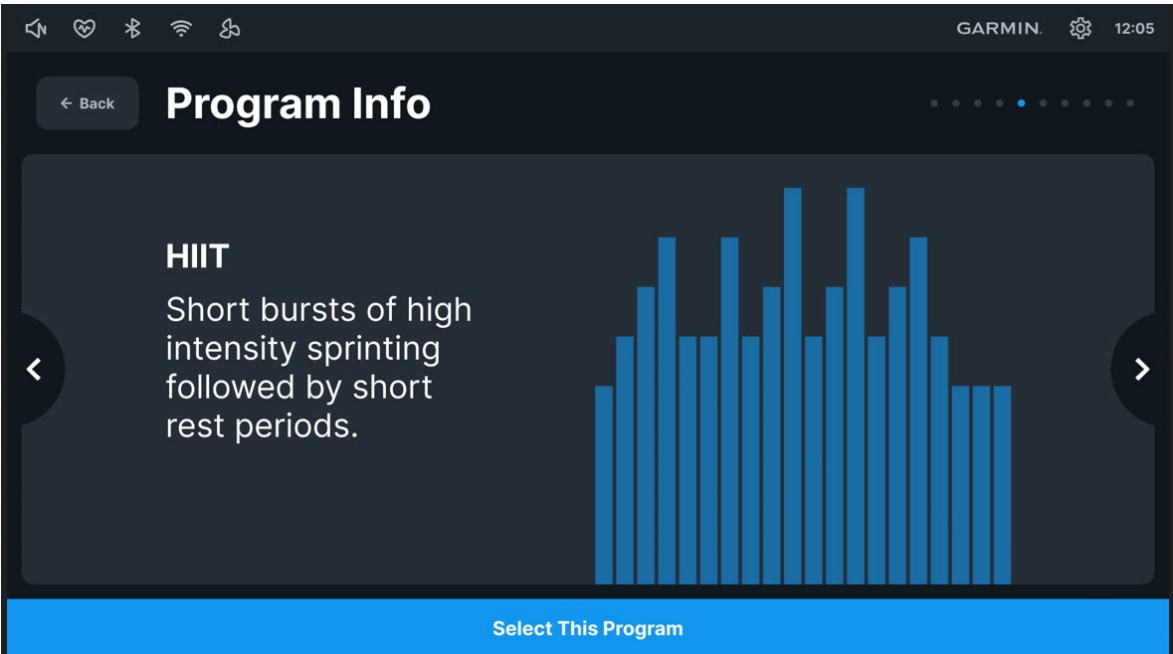


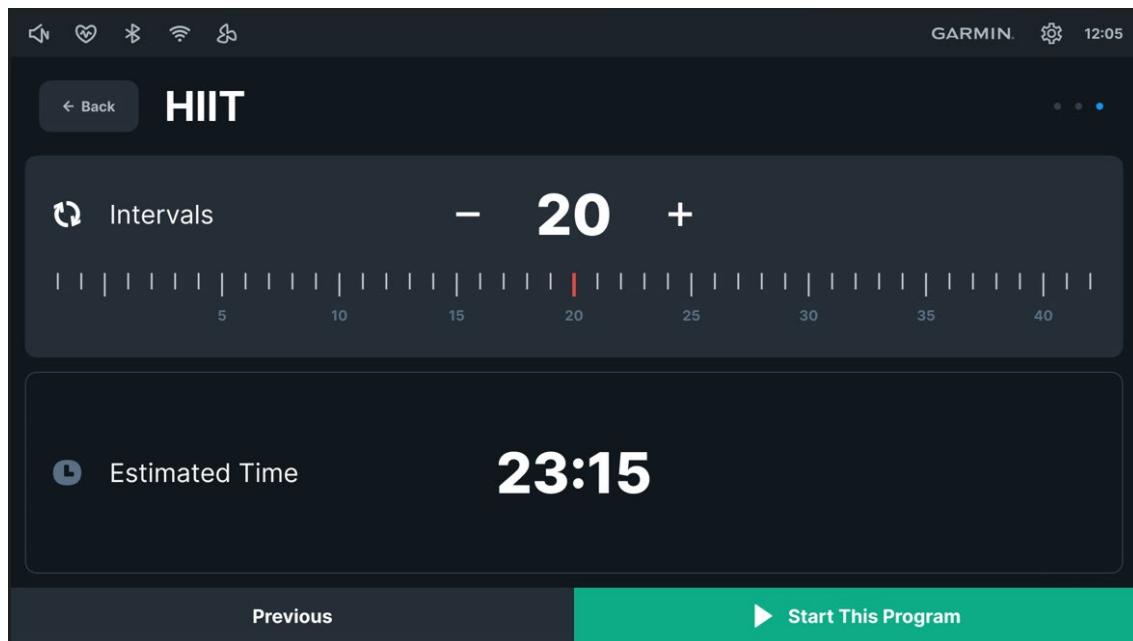
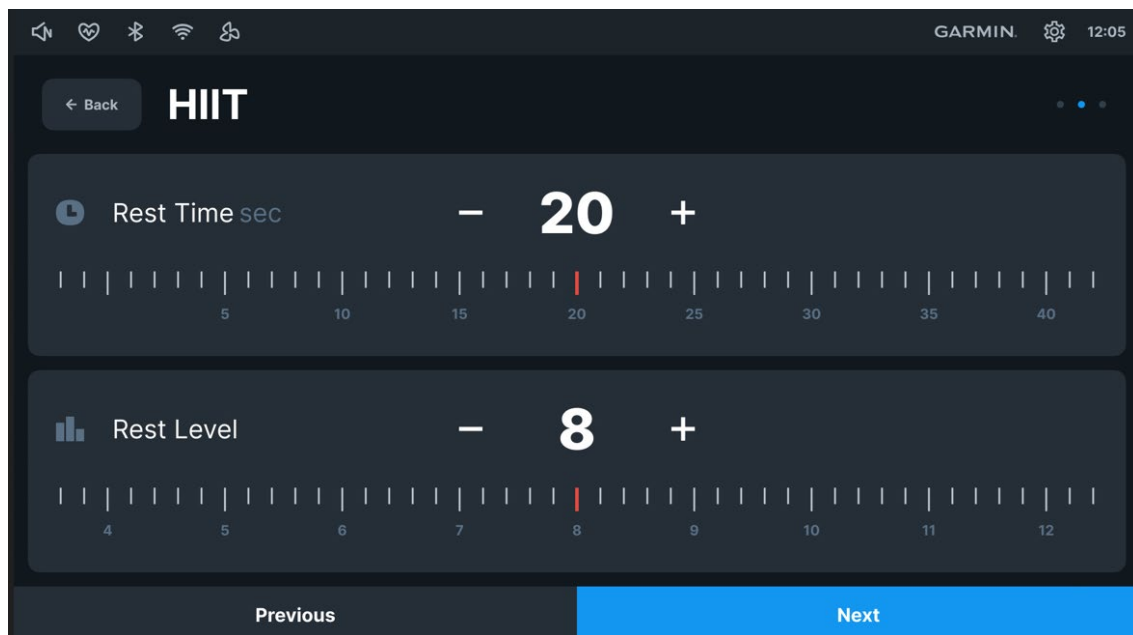
TO BEGIN A CUSTOM PROGRAM:

1. Select the Custom program to begin customizing the program with your personal data.
2. To adjust the resistance level profiles, use the on-screen interface to complete the desired workout profile and desired workout time. Once complete, press **Start this program**.

HIIT PROGRAM

The HIIT, or High Intensity Interval Training, program takes advantage of the latest trend in fitness. During the program, you will perform short bursts of high-intensity sprinting followed by short rest periods. HIIT is a fully customizable interval training program. You can enter the number of intervals, the time of each interval Sprint and Rest period and the work intensity of the levels.



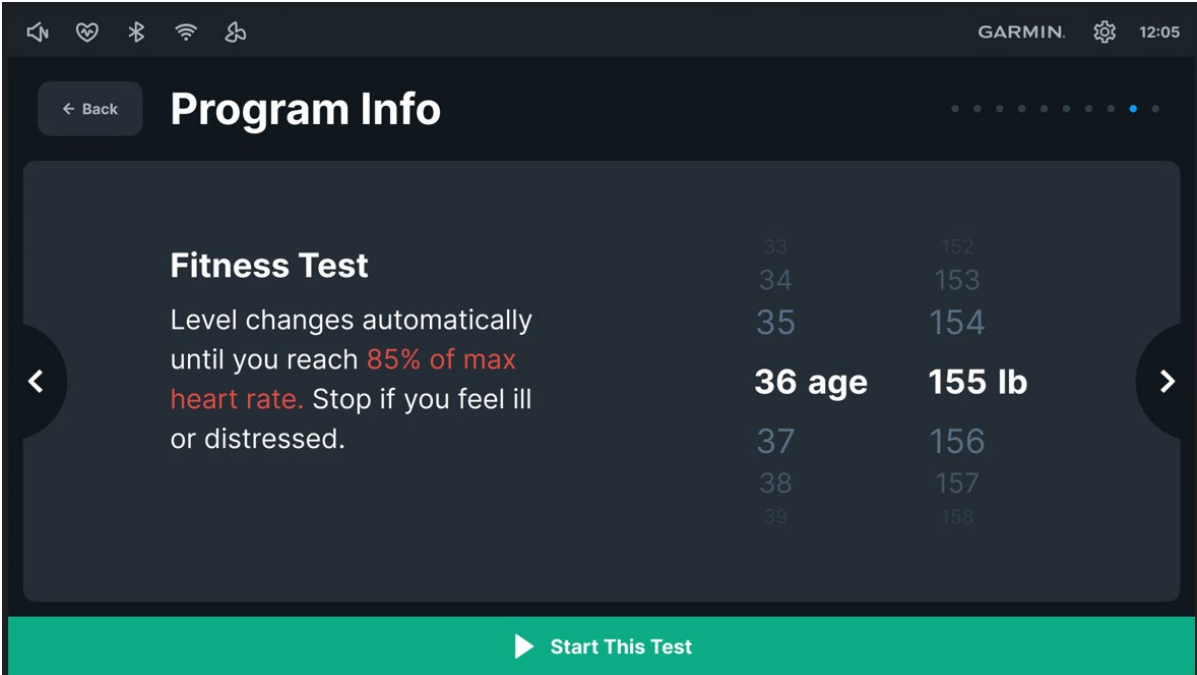


1. **Select this program** to begin customizing the program with your personal data,
2. **Next** is to set Sprint time/Sprint Level and Rest time/Rest Level.
3. Finally, set the number of intervals you want to do. One interval stands for 1 Sprint and 1 Rest segment.
4. Press **Start this program** to begin the HIIT program. The program starts with a 3-minute warm-up period with the resistance level set to 50% of the sprint speed selected previously. You can manually adjust the resistance level during warm-up if you wish.

FITNESS TEST

The VO2 program is based on the YMCA protocol and is a sub-maximal test that uses pre-determined, fixed work levels that are based on your heart rate readings as the test progresses. The test will take anywhere between 6 to 15 minutes to complete, depending on your level of fitness. The test ends when your heart rate reaches 85% of maximum at any time during the test, or your heart rate is between 110 bpm and 85% at the end of two consecutive stages. At the end of the test, a VO2 max score will be given. VO2max stands for Volume of Oxygen uptake, which is a measurement of how much oxygen you need to perform a known amount of work. The YMCA protocol uses two to four 3-minute stages of continuous exercise (see charts below). You will be asked to choose either Male or Female at the beginning of the test.

This choice determines which test parameters will be used during the test, as shown in the charts below.



Workload chart for male or very fit female:

1st Stage				300 kgm/min					
HR		< 90			90 - 105			> 105	
2nd Stage		900 kgm/min			750 kgm/min			600 kgm/min	
HR	HR <120	HR 120-135	HR >135	HR <120	HR 120-135	HR >135	HR <120	HR 120-135	HR >135
3rd stage	1350 kgm/min	1200 kgm/min	1050 kgm/min	1200 kgm/min	- 1050 kgm/min	900 kgm/min	1050 kgm/min	900 kgm/min	750 kgm/min

Workload chart for female or de-conditioned male

1st Stage			150 kgm/min	
Heart Rate	HR<80	HR: 80-90	HR: 90-100	HR>100
2nd Stage	750 kgm/min	600 kgm/min	450 kgm/min	300 kgm/min
3rd Stage	900 kgm/min	750 kgm/min	600 kgm/min	450 kgm/min
4th Stage (if needed)	1050 kgm/min	900 kgm/min	700 kgm/min	600 kgm/min

Before the Test:

- Make sure you are in good health; check with your physician before performing any exercise if you are over the age of 35 or persons with pre-existing health conditions.
- Make sure you have warmed up and stretched before taking the test.
- Do not take in caffeine before the test.
- Hold the hand grips gently; do not tense up.

During the Test

- The console must be receiving a steady heart rate for the test to begin. You may use the hand pulse sensors or wear a heart rate chest strap transmitter.
- You must maintain a steady 50 rpm pedal speed. If your pedal speed drops below 48 rpm or goes above 52 rpm, the console will emit a steady beeping sound until you are within this range.
- You may scroll through the various data readings by pressing the Display button under the Message Window.
- The Message Window will always display your pedal speed on the right side to help you maintain 50 rpm.
- The data shown during the test is:
 1. Work in KGM is actually an abbreviated form of kg-m/min. Which is a work measurement of kilogram-force meter/minute
 2. Work in Watts (1 watt is equal to 6.11829727787 kg-m/min.)
 3. HR is your actual heart rate; TGT is the target heart rate to reach the end of the test.
 4. Time is the total elapsed time of the test.

After The Test:

- Cool down for about one to three minutes.
- Take note of your score because the console will automatically return to the start-up mode after a few minutes.

What your score means:

VO2max Chart for males and very fit females

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	>60	>56	>51	>45	>41	>37
good	52-60	49-56	43-51	39-45	36-41	33-37
above average	47-51	43-48	39-42	35-38	32-35	29-32
average	42-46	40-42	35-38	32-35	30-31	26-28
below average	37-41	35-39	31-34	29-31	26-29	22-25
poor	30-36	30-34	26-30	25-28	22-25	20-21
very poor	<30	<30	<26	<25	<22	<20

VO2max Chart for females and de-conditioned males

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	56	52	45	40	37	32
good	47-56	45-52	38-45	34-40	32-37	28-32
above average	42-46	39-44	34-37	31-33	28-31	25-27
average	38-41	35-38	31-33	28-30	25-27	22-24
below average	33-37	31-34	27-30	25-27	22-24	19-22
poor	28-32	26-30	22-26	20-24	18-21	17-18
very poor	<28	<26	<22	<20	<18	<17

HEART RATE PROGRAMS

The old motto, "no pain, no gain," is a myth that has been overpowered by the benefits of exercising comfortably. A great deal of this success has been promoted by the use of heart rate monitors. With the proper use of a heart rate monitor, many people find that their choice of exercise intensity is either too high or too low, and exercise is much more enjoyable by maintaining their heart rate in the desired benefit range.

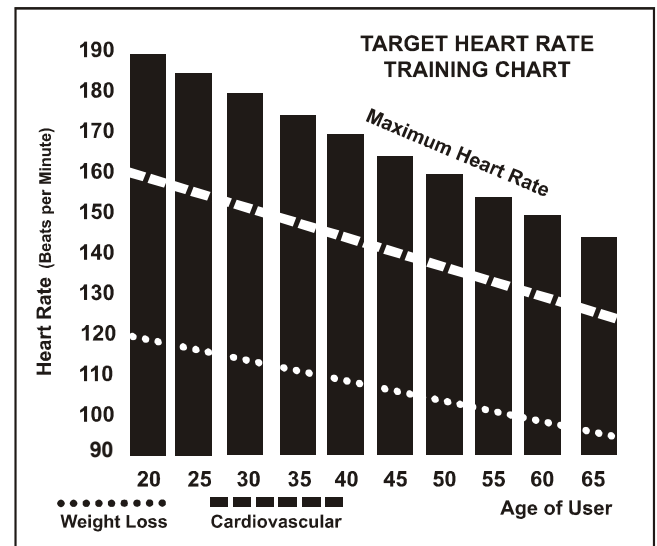
To determine the benefit range in which you wish to train, you must first determine your Maximum Heart Rate. This can be accomplished by using the following formula: 220 minus your age. This will give you the Maximum heart rate (MHR) for someone of your age. To determine the effective heart rate range for specific goals, you simply calculate a percentage of your MHR. Your Heart rate training zone is 50% to 90% of your maximum heart rate. 65% of your MHR is the zone that burns fat, while 85% is for strengthening the cardiovascular system. This 65% to 85% is the zone to stay in for maximum benefit.

For someone who is 40 years old, their target heart rate zone is calculated as follows:

$220 - 40 = 180$ (maximum heart rate)
 $180 \times .65 = 117$ beats per minute (65% of maximum)
 $180 \times .85 = 153$ beats per minute (85% of maximum)

So, for a 40-year-old, the training zone would be 117 to 153 beats per minute.

If you enter your age during programming, the console will perform this calculation automatically. Entering your age is used for the Heart Rate control programs. After calculating your Maximum Heart Rate, you can decide upon which goal you would like to pursue.



The two most popular reasons for, or goals, of exercise are cardiovascular fitness (training for the heart and lungs) and weight control. The black columns on the chart above represent the Maximum Heart Rate for a person whose age is listed at the bottom of each column. The training heart rate, for either cardiovascular fitness or weight loss, is represented by two different lines that cut diagonally through the chart. A definition of the lines' goal is in the bottom left-hand corner of the chart. If your goal is cardiovascular fitness or if it is weight loss, it can be achieved by training at 85% or 65%, respectively, of your Maximum Heart Rate on a schedule approved by your physician. Consult your physician before participating in any exercise program.

With all Heart Rate Control elliptical equipment, you may use the heart rate monitor feature without using the Heart Rate Control program. However, when using the heart rate monitor feature in conjunction with the Heart Rate programs, the machine will automatically adjust speed or incline to maintain the desired heart rate.

CAUTION!

The target value used in HR programs is a suggestion only for normal, healthy individuals. Do not exceed your limits! You may not be able to obtain your chosen target. If in question, enter a higher age value that will set a lower target goal.

RATE OF PERCEIVED EXERTION

Heart rate is important, but listening to your body also has a lot of advantages. There are more variables involved in how hard you should work out than just heart rate. Your stress level, physical health, emotional health, temperature, humidity, the time of day, the last time you ate and what you ate all contribute to the intensity at which you should workout. If you listen to your body, it will tell you all of these things.

The rate of perceived exertion (RPE), also known as the Borg scale, was developed by Swedish physiologist G.A.V. Borg. This scale rates exercise intensity from 6 to 20 depending upon how you feel or the perception of your effort.

The scale is as follows:

Rating Perception of Effort

- 6 Minimal
- 7 Very, very light
- 8 Very, very light +
- 9 Very light
- 10 Very light +
- 11 Fairly light
- 12 Comfortable
- 13 Somewhat hard
- 14 Somewhat hard +
- 15 Hard
- 16 Hard +
- 17 Very hard
- 18 Very hard +
- 19 Very, very hard
- 20 Maximal

You can get an approximate heart rate level for each rating by simply adding a zero to each rating. For example, a rating of 12 will result in an approximate heart rate of 120 beats per minute. Your RPE will vary depending on the factors discussed earlier. That is the major benefit of this type of training. If your body is strong and rested, you will feel strong, and your pace will feel easier. When your body is in this condition, you are able to train harder, and the RPE will support this. If you are feeling tired and sluggish, it is because your body needs a break. In this condition, your pace will feel harder. Again, this will show up in your RPE, and you will train at the proper level for that day.

GENERAL MAINTENANCE

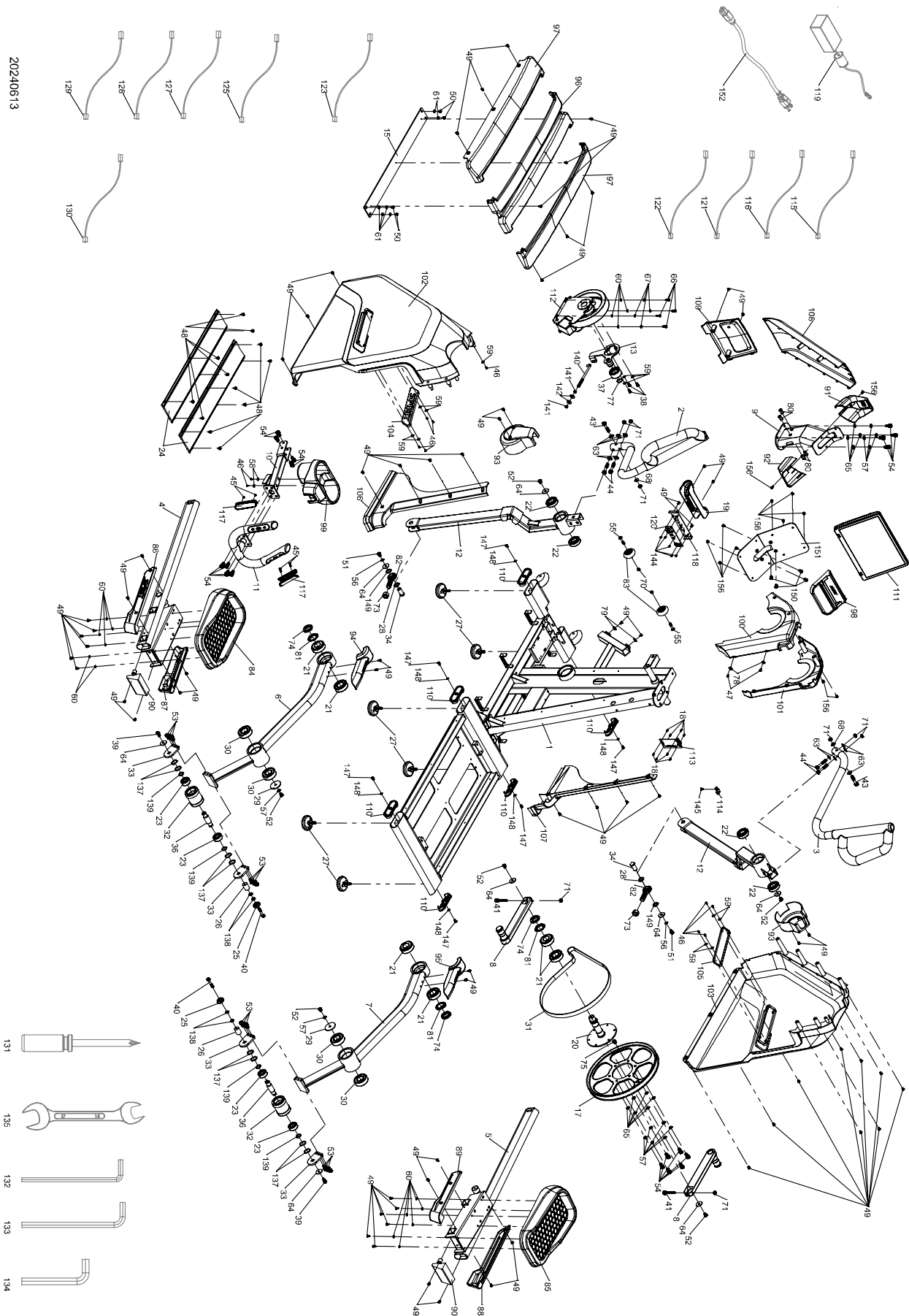
1. Wipe down all areas in the sweat path with a damp cloth after each workout.
2. If a squeak, thump, clicking, or rough feeling develops, the main cause is most likely one of two reasons:
 - a. The hardware was not sufficiently tightened during assembly. All bolts that were installed during assembly need to be tightened as much as possible. It may be necessary to use a larger wrench than the one provided if you cannot tighten the bolts sufficiently. I cannot stress this point enough: 90% of calls to the service department for noise issues can be traced to loose hardware.
 - b. The crank arm nut needs to be retightened. If squeaks or other noises persist, check that the unit is properly levelled. There are six levelling pads. Four at the bottom of the rear and front rail assembly and two at the bottom of the front stabilizer. Use a 14mm wrench (or an adjustable wrench) to adjust the levellers.

WARNING

The effect that the safety level of the equipment can be maintained only if it is examined regularly for damage and wear.

- i. Replace defective components immediately and/or keep the equipment out of use until repair.
- ii. The components which are most susceptible to wear: Belt · PU wheel · Bearing · Idler.

EXPLODED VIEW DIAGRAM



PARTS LIST

KEY NO.	DESCRIPTION	Q'TY
1	Main Frame	1
2	Handlebar (L)	1
3	Handlebar (R)	1
4	Connecting Arm (L)	1
5	Connecting Arm (R)	1
6	Pedal Arm (L)	1
7	Pedal Arm (R)	1
8	Crank Arm Assembly	2
9	Console Mast	1
10	Handlebar bracket	1
11	Center Handlebars	1
12	Swing Arm	2
13	Idler Wheel Assembly	1
15	Aluminum Track	1
17	Flywheel Pulley(Ø400×32)	1
18	Isolation Column	8
19	TVC Cover	1
20	Arbor	1
21	Ø72 × Ø35 × 24.3T_Bearing	6
22	6206_Bearing	4
23	Ø47 × Ø20 × 18T_Bearing	4
24	Rail	2
25	PU Wheel	2
26	Arbor	2
27	Foot Pad	6
28	Ø20.7 × Ø45 × 2.5T_Flat Washer	2
29	Ø59 × 3T_Wheel Cover	2
30	Ø72 × Ø35 × 23T_Bearing	4
31	Drive Belt	1
32	Transportation Wheel	2
33	Back Plate	4
34	Rod End Sleeve	2
36	Transportation Wheel Axle	2
37	Axle for Idler Wheel (30×59×28.3/13)	1
38	M5 × 15m/m_Socket Head Cap Bolt	3
39	M8 × 20m/m_Socket Head Cap Bolt	2
40	M8 × 55m/m_Socket Head Cap Bolt	2
41	M10 × 60m/m_Socket Head Cap Bolt	2
43	M10 × 55m/m_Socket Head Cap Bolt	2
44	M10 × 60m/m_Socket Head Cap Bolt	4
45	3 × 20m/m_Tapping Screw	4
46	3.5 × 12m/m_Sheet Metal Screw	11
47	5 × 16m/m_Sheet Metal Screw	2
48	M6 × 10m/m_Phillips Head Screw	12
49	M5 × P0.8 × 12L_Phillips Head Screw	69
50	M8 × 12m/m_Button Head Socket Bolt	4

KEY NO.	DESCRIPTION	Q'TY
51	M8 × P1.25 × 15m/m Socket Head Cap Bolt	2
52	M10 × P1.5 × 15m/m Button Head Socket Bolt	6
53	M10 × 20m/m Socket Head Cap Bolt	12
54	M10 × P1.5 × 20m/m Socket Head Cap Bolt	18
55	5/16" × 1-3/4" Button Head Socket Bolt	2
56	Ø8.5 × 1.5T Split Washer	2
57	Ø10 × 2T Split Washer	12
58	Ø4 × 14 × 1.0T Flat Washer	2
59	Ø5 × Ø15 × 1.0T Flat Washer	12
60	Ø6.6 × Ø12 × 1.5T Flat Washer	16
61	Ø8.5 × Ø16 × 1.5T Flat Washer	6
63	Ø10 × Ø25 × 1.5T Flat Washer	10
64	Ø3/8" × 35 × 2.0T Flat Washer	8
65	Ø3/8" × Ø19 × 1.5T Flat Washer	10
66	1/4" × UNC20 × 3/4" Hex Head Bolt	4
67	Ø1/4" Split Washer	4
68	Ø10 × Ø23 × 1.5T Curved WasherR38	2
70	5/16" × 7T Nyloc Nut	2
71	M10 × 8T Nyloc Nut	8
73	M20 × 15T Nut	2
74	M35 × P1.5 × 8T Nut	3
75	Magnet(Ø15×7T)	1
77	Ø28 C Ring	1
78	M5 Speed Nut Clip	2
79	M5 × P0.8 × 1T Plate	2
80	M10 × 1.5L Hex Blind Nut	4
81	Bolt	3
82	Rod End Bearing	2
83	Transportation Wheel(PU.Ø65)	2
84	Pedal (L)	1
85	Pedal (R)	1
86	Pedal Arm Cover A(L)	1
87	Pedal Arm Cover B(L)	1
88	Pedal Arm Cover A(R)	1
89	Pedal Arm Cover B(R)	1
90	Rear Shroud	2
91	Chin Cover (Front)	1
92	Chin Cover(Rear)	1
93	Swing Arm Hinge Cover	2
94	Cover (L)	1
95	Cover (R)	1
96	Slide Wheel Cover A	1
97	Slide Wheel Cover B	2
98	Keyboard	1
99	Cup Holder	1
100	Console Mast Cover(L)	1
101	Console Mast Cover(R)	1

KEY NO.	DESCRIPTION	Q'TY
102	Side Case (L)	1
103	Side Case (R)	1
104	Side Case Plate(L)	1
105	Side Case Plate(R)	1
106	Console Mast Inner Cover(L)	1
107	Console Mast Inner Cover(R)	1
108	Front Shroud	1
109	Power Switch Cover	1
110	Cap	6
111	Console Assembly	1
112	Generator/Resistance	1
113	Generator/Brake Controller	1
114	300m/m_Sensor W/Cable	1
115	850m/m_Handpulse Wire(SMR4)	1
116	850m/m_Handpulse Wire(SMP3)	1
117	30m/m_Handpulse W/Cable Assembly	2
118	Transfer board	1
119	Switching Power Supply	1
120	Board	1
121	1100m/m_Power Cord	1
122	1900m/m_Communication Cable	1
123	2600m/m_HDMI Wire	1
125	1150m/m_Computer Cable	1
127	750m/m_Wire Brake Coil Harness(Red)	1
128	900m/m_Connecting Wire	1
129	200m/m_DC Power Cord	1
130	1900m/m_Connecting Wire	1
131	Phillips Head Screwdriver	1
132	L Allen Wrench(5×26×120L)	1
133	6 L Allen Wrench	1
134	M8 L Allen Wrench	1
135	14/17m/m_Wrench	1
137	Ø20 × 0.3T_Wave Washer	8
138	Ø8 × 1.5T_Spring Washer	4
139	Back Plate	4
140	M8 × 170m/m_J Bolt	1
141	M8 × 6.3T_Luck Nut	2
142	Ø3/8" × Ø25 × 2.0T_Flat Washer	2
144	M3 × 6m/m_Phillips Head Screw	5
145	M5 × 10L_Phillips Head Screw	1
147	M5 × P0.8 × 15L_Phillips Head Screw	6
148	Ø1/4" × 13 × 1.0T_Flat Washer	6
149	Ø20.3 × Ø38 × 2T_Flat Washer	2
150	M8 × 20L_Flat Head Countersink Bolt	4
151	Screen Plate	1
152	Power Cord	1
156	M5 × P0.8 × 10L_Phillips Head Screw	12

TRAINING GUIDELINES

EXERCISE

Exercise is one of the most important factors in the overall health of an individual. Listed among its benefits are:

- Increased capacity for physical work (strength endurance)
- Increased cardiovascular (heart and arteries/veins) and respiratory efficiency
- Decreased risk of coronary heart disease
- Changes in body metabolism, e.g. losing weight
- Delaying the physiological effects of age
- Physiological effects, e.g. reduction in stress, increase in self-confidence, etc.

BASIC COMPONENTS OF PHYSICAL FITNESS

There are four all-encompassing components of physical fitness, and we need to briefly define each and clarify its role.

Strength is the capacity of a muscle to exert a force against resistance. Strength contributes to power and speed and is of great importance to a majority of sportspeople.

Muscular Endurance is the capacity to exert a force repeatedly over a period of time, e.g. it is the capacity of your legs to carry you 10 Km without stopping.

Flexibility is the range of motion of a joint. Improving flexibility involves the stretching of muscles and tendons to maintain or increase suppleness and provides increased resistance to muscle injury or soreness.

Cardio-respiratory endurance is an essential component of physical fitness. It is the efficient functioning of the heart and lungs.

AEROBIC FITNESS

The largest amount of oxygen that you can use per minute during exercise is called your maximum oxygen uptake (MVo₂). This is often referred to as your aerobic capacity.

The effort that you can exert over a prolonged period of time is limited by your ability to deliver oxygen to the working muscles. Regular vigorous exercise produces a training effect that can increase your aerobic capacity by as much as 20 to 30%. An increased MVO₂ indicates an increased ability of the heart to pump blood, of the lungs to ventilate oxygen and of the muscles to take up oxygen.

ANAEROBIC TRAINING

This means “without oxygen” and is the output of energy when the oxygen supply is insufficient to meet the body’s long-term energy demands. (For example, 100-meter sprint).

The Training Threshold

This is the minimum level of exercise which is required to produce significant improvements in any physical fitness parameter.

Progression

As you become fitter, a higher intensity of exercise is required to create an overload and, therefore, provide continued improvement.

Overload

This is where you exercise at a level above that which can be carried out comfortably. The intensity, duration and frequency of exercise should be above the training threshold and should be gradually increased as the body adapts to the increasing demands. As your fitness level improves, so the training threshold should be raised.

Working through your program and gradually increasing the overload factor is important.

Specificity

Different forms of exercise produce different results. The type of exercise that is carried out is specific both to the muscle groups being used and to the energy source involved.

There is little transfer of the effects of exercise, i.e. from strength training to cardiovascular fitness.

That is why it is important to have an exercise program tailored to your specific needs.

Reversibility

If you stop exercising or do not do your program often enough, you will lose the benefits you have gained. Regular workouts are the key to success.

WARM-UP

Every exercise program should start with a warm-up where the body is prepared for the effort to come. It should be gentle and preferably use the muscles to be involved later.

Stretching should be included in both your warm-up and cool-down and should be performed after 3-5 minutes of low-intensity aerobic activity or callisthenic-type exercise.

Warm Down or Cool Down

This involves a gradual decrease in the intensity of the exercise session. Following exercise, a large supply of blood remains in the working muscles. If it is not returned promptly to the central circulation, pooling of blood may occur in the muscles.

Heart Rate

As you exercise, so does the rate at which your heartbeat also increases. This is often used as a measure of the required intensity of exercise. You need to exercise hard enough to condition your circulatory system and increase your pulse rate but not enough to strain your heart.

Your initial level of fitness is important in developing an exercise program for you. If you are starting off, you can get a good training effect with a heart rate of 110-120 beats per minute (BPM). If you are fitter, you will need a higher threshold of stimulation.

To begin with, you should exercise at a level that elevates your heart rate to about 65 to 70% of your maximum. If you find this is too easy, you may want to increase it, but it is better to lean on the conservative side.

As a rule of thumb, the maximum heart rate is 220 minus your age. As you increase in age, your heart, like other muscles, loses some of its efficiency. Some of its natural loss is won back as fitness improves.

The following table is a guide to those who are "starting fitness."

Age	25	30	35	40	45	50	55	60	65
Target heart Rate									
10 Second Count	23	22	22	21	20	19	19	18	18
Beats per Minute	138	132	132	126	120	114	114	108	108

Pulse Count

The pulse count (on your wrist or carotid artery in the neck, taken with two index fingers) is done for ten seconds, taken a few seconds after you stop exercising. This is for two reasons: (a) 10 seconds is long enough for accuracy, and (b) the pulse count is to approximate your BPM rate at the time you are exercising. Since heart rate slows as you recover, a longer count isn't as accurate.

The target is not a magic number but a general guide. If you have above-average fitness, you may work quite comfortably, a little above that suggested for your age group.

The following table is a guide to those who are keeping fit. Here, we are working at about 80% of the maximum.

Age	25	30	35	40	45	50	55	60	65
Target heart Rate									
10 Second Count	26	26	25	24	23	22	22	21	20
Beats per Minute	156	156	150	144	138	132	132	126	120

Don't push yourself too hard to reach the figures on this table. It can be very uncomfortable if you overdo it. Let it happen naturally as you work through your program. Remember, the target is a guide, not a rule; a little above or below is just fine.

Two final comments:(1) don't be concerned with day-to-day variations in your pulse rate; being under pressure or not getting enough sleep can affect it;(2) your pulse rate is a guide, don't become a slave to it.

ENDURANCE CIRCUIT TRAINING

Cardiovascular endurance, muscle, strength, flexibility and coordination are all necessary for maximum fitness. The principle behind circuit training is to give a person all the essentials at one time by going through your exercise program, moving as fast as possible between each exercise. This increases the heart rate and sustains it, which improves the fitness level. Do not introduce this circuit training effect until you have reached an advanced program stage.

Body Building

It is often used synonymously with strength training. The fundamental principle here is OVERLOAD. Here, the muscle works against greater loads than usual. This can be done by increasing the load you are working against.

Patronization

This is the term used to vary your exercise program for both physiological and psychological benefits. In your overall program, you should vary the workload, frequency and intensity. The body responds better to variety, and so do you. In addition, when you feel yourself getting "stale", bring in periods of lighter exercise to allow the body to recuperate and restore its reserves. You will enjoy your program more and feel better about it.

Muscle Soreness

For the first week or so, this may be the only indication you have that you are on an exercise program. This, of course, does depend on your overall fitness level. A confirmation that you are on the correct program is a very slight soreness in most major muscle groups. This is quite normal and will disappear in a matter of days.

If you experience major discomfort, you may be on a program that is too advanced, or you have increased your program too rapidly.

If you experience PAIN during or after exercise, your body is telling you something.

Stop exercising and consult your doctor.

WHAT TO WEAR

Wear clothing that will not restrict your movement in any way while exercising. Clothes should be light enough to allow the body to cool. Excessive clothing that causes you to perspire more than you normally would while exercising gives you no advantage. The extra weight you lose is body fluid and will be replaced with the next glass of water you drink. It is advisable to wear a pair of gym or running shoes or "sneakers."

Breathing during Exercise

Do not hold your breath while exercising. Breathe normally as much as possible. Remember, breathing involves the intake and distribution of oxygen, which feeds the working muscles.

Rest periods

Once you start your exercise program, you should continue through to the end. Do not break off halfway through and then restart at the same place later on without going through the warm-up stage again.

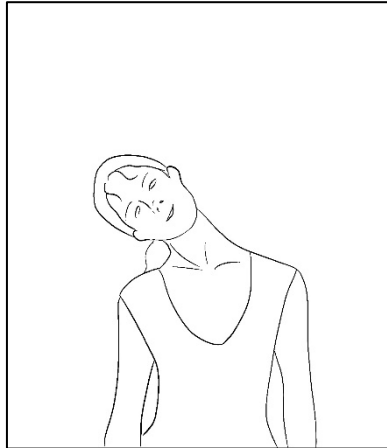
The rest period required between strength training exercises may vary from person to person. This will depend mostly on your level of fitness and the program you have chosen. Rest between exercises by all means, but do not allow this to exceed two minutes. Most people manage with half-minute to one-minute rest periods.

STRETCHING

Stretching should be included in both your warm-up and cool-down and should be performed after 3-5 minutes of low-intensity aerobic activity or callisthenic-type exercise. Movements should be performed slowly and smoothly, with no bouncing or jerking. Move into the stretch until slight tension; no pain is felt in the muscle, and hold for 20-30 seconds. Breathing should be slow, rhythmical and under control, making sure never to hold your breath.

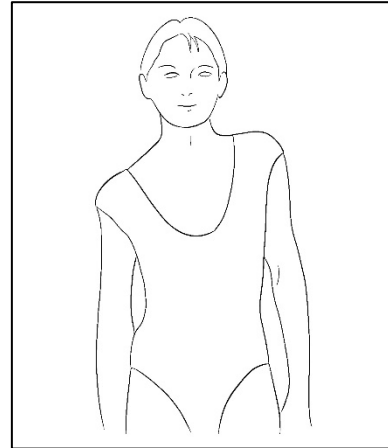
HEAD ROLLS

Rotate your head to the right for one count, feeling the stretch up the left side of your neck. Next, rotate your head back for one count, stretch your chin to the ceiling, and let your mouth open. Rotate your head to the left for one count, and finally, drop your head to your chest for one count.



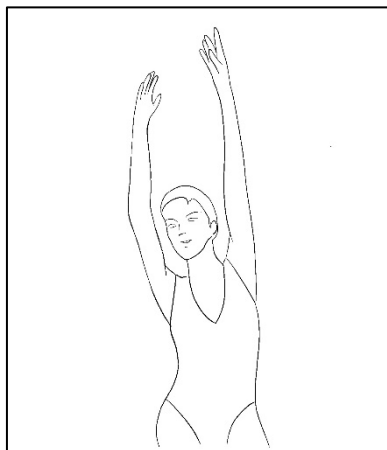
SHOULDER LIFTS

Lift your right shoulder toward your ear for one count. Then, lift your left shoulder for one count as you lower your right shoulder.



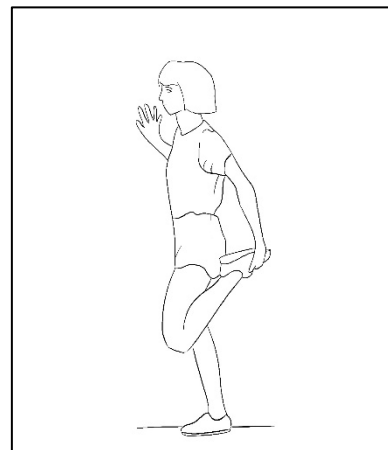
SIDE STRETCHES

Open your arms to the side and continue lifting them until they are over your head. Reach your right arm as far upward toward the ceiling as you can for one count. Feel the stretch up your right side. Repeat this action with your left foot and left arm.



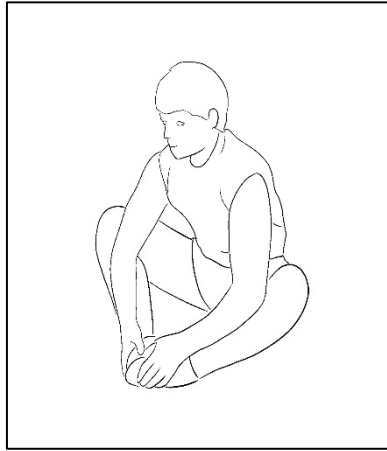
QUADRICEPS STRETCH

With one hand against a wall for balance, reach behind you and pull your right foot up. Bring your heel as close to your buttocks as possible. Hold for 15 counts and repeat with left foot up.



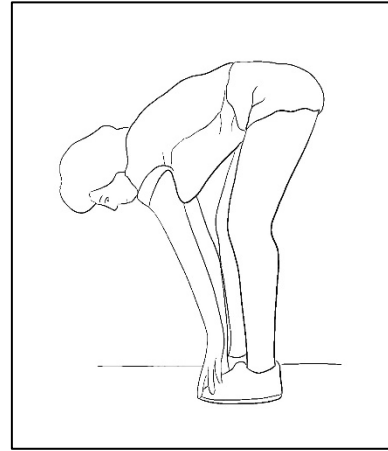
INNER THIGH STRETCH

Sit with the soles of your feet together with your knees pointing outward. Pull your feet as close to your groin as possible. Gently push your knees towards the floor. Hold for 15 counts.



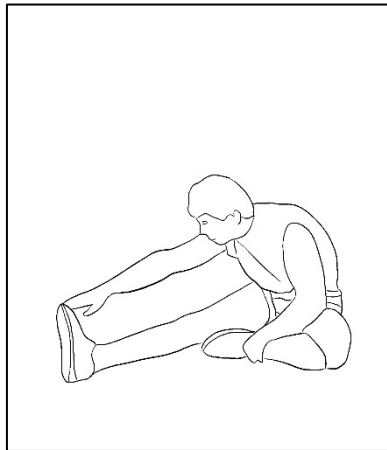
TOE TOUCHES

Slowly bend forward from your waist, letting your back and shoulders relax as you stretch toward your toes. Reach down as far as you can and hold for 15 counts.



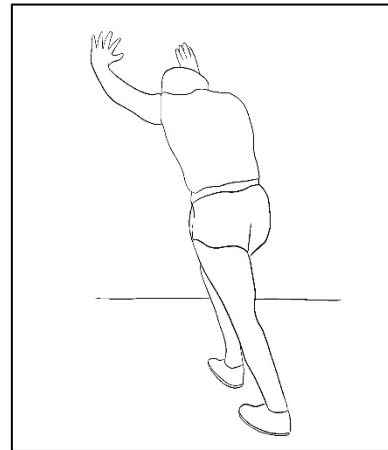
HAMSTRING STRETCHES

Sit with your right leg extended. Rest the sole of your left foot against your right inner thigh. Stretch your toe as far as possible. Hold for 15 counts. Relax and then repeat with the left leg extended.



CALF / ACHILLES STRETCH

Lean against a wall with your left leg in front of the right and your arms forward. Keep your right leg straight and the left foot on the floor, then bend the left leg and lean forward by moving your hips toward the wall. Hold, then repeat on the other side for 15 counts.



MANUFACTURER'S LIMITED WARRANTY

Dyaco Canada Inc. warrants all its elliptical parts for the period of time listed below from the date of retail sale, as determined by a sales receipt or in the absence of a sales receipt. Dyaco Canada Inc.'s responsibilities include providing new or remanufactured parts at Dyaco Canada Inc.'s option and technical support to our independent dealers and servicing organizations. In the absence of a dealer or service organization, these warranties will be administered by Dyaco Canada Inc. directly to a consumer. The warranty period applies to the following components:

Commercial Warranty (Dues Paying Facility)

Frame	10 years	
Brake	5 years	
Parts	3 years / Console Parts	2 years
Labour	3 years / Console Labour	1 year
Wear Items	6 months	

This warranty is not transferable and is extended only to the original owner.

The warranty shall not apply to exercise units which are subject to misuse, neglect, accident or unauthorized repair and alterations. This warranty is provided herein in lieu of all other express warranties. Any implied warranties, including any implied warranties of merchantability or fitness for a particular purpose, are limited in duration to the first 12 months from the date of purchase. All other obligations or liabilities, including liability for consequential damages, are hereby excluded.

REPAIR PARTS AND SERVICE

All of the parts for the elliptical shown in the figure can be ordered from Dyaco Canada Inc. 5955 DON MURIE STREET, NIAGARA FALLS, ON L2G 0A9. When ordering parts, the parts will be sent and billed at the current prices. Prices may be subject to change without notice. Check or money order must accompany all orders. Standard hardware items are available at your local hardware store.

To ensure prompt and correct handling of any errors or to answer any questions, please call our Toll-Free number: 1-888-707-1880, or local number 1-905-353-8955 or fax 1-905-353-8968 or email customerservice@dyaco.ca or visit us at www.dyaco.ca. Office hours are from 8:30 AM to 5:00 PM Monday to Friday Eastern Standard Time.

Always include the following information when ordering parts

- _ Model and serial number
- _ Name of each part
- _ Part number of each part



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