WARNING: Before starting any exercise program, we strongly suggest you visit your doctor for a complete physical and to discuss your exercise plans.

Duo Sport: Features

Thank you for selecting the New Balance Duo Sport Heart Rate Monitor.

The Duo Sport is designed to allow you to acquire your heart rate reading two ways:

- CONTINUOUS: via traditional chest strap (included)

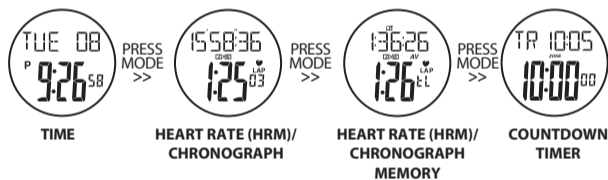- ON-DEMAND: via the latest technology in finger touch heart rate acquisition

The Duo Sport is created with multiple levels of athleticism in mind. The chest strap allows you to monitor your heart rate continuously during your cardio workouts and running sessions; when the finger touch acquisition will slow you down. When yourexercise regimen is less strenuous (walking, stretching, etc) or you simply want to view your current heart rate reading, the Duo Sport features a buttonless touch metalbezel for on-demand heart rate readings.

Below is a full list of the features found in the Duo Sport:

- Chest Strap Transmitter for Continuous Heart Rate Readings
- Finger Touch Acquisition for On-Demand Heart Rate Readings
- Preset & Customizable Target Heart Rate Zones
- Heart Rate Zone Alert
- % Max Heart Rate
- Heart Rate Zone Memory Recall
- 10 Hour Chronograph with Lap/Split Memory Recall
- Measures 25 Laps/Splits
- 10 Hour Countdown Timer with Alarm
- Calorie Burn Measurement
- Fat Burn Measurement
- 12 and 24 Hour Time
- Time / Day / Date / Month
- One Daily Alarm
- Imperial or Metric Units
- EL Backlight
- 50M Water Resistant

Modes of Operation

NOTE: TOUCH & HOLD the HEART RATE SENSOR in any operating mode to acquire Finger Touch Heart Rate Readings

TIME		HEART RATE (HRM)/ CHRONOGRAPH		HEART RATE (HRM)/ CHRONOGRAPH MEMORY		COUNTDOWN TIMER
	PRESS MODE >>		PRESS MODE >>		PRESS MODE >>	

Setting Time and Date

- In TIME mode, *PRESS & HOLD* MODE for 3 seconds until the display flashes.
- *PRESS* STR / STP or VIEW / RST to reset the seconds to zero.
- *PRESS* MODE to advance to the minute settings.
  Edit the minutes value by *PRESSING* STR / STP or VIEW / RST.
- *PRESS* MODE to advance thru the remaining TIME mode settings and STR / STP or VIEW / RST to edit the values:

• Hour	• Hourly Chime	• Height
• Year	• Key Beep	• Unit (lbs/kgs)
• Month	• Gender (M or F)	• Weight
• Date	• Birth Year	
• 12 / 24 Hour Format	• Unit (inch/cm)	

NOTE: With the Chime ON, a short beep will sound at the turn of the hour and a small bell icon will appear in the display.

NOTE: With the Key Beep ON, a short beep will sound on each button press.

- To save the new settings, *PRESS & HOLD* MODE for 3 seconds.

Setting Daily Alarm

- In TIME mode, *PRESS & HOLD* STR / STP for 3 seconds until the display flashes.
- *PRESS* STR / STP or VIEW / RST to toggle the alarm ON or OFF.

NOTE: A small speaker icon will appear in all displays when the alarm is turned ON.

- *PRESS* MODE to advance to the hour setting, then *PRESS* STR / STP or VIEW / RST to set the desired hour.
- *PRESS* MODE to advance to the minute setting, then *PRESS* STR / STP or VIEW / RST to set the desired minute.
- To save the new settings, *PRESS & HOLD* MODE for 3 seconds.

Setting the Countdown Timer

The Duo Sport is equipped with a 10-Hour Countdown Timer.

- In COUNTDOWN TIMER mode, *PRESS & HOLD* MODE for 3 seconds until the display flashes.
- *PRESS* STR / STP or VIEW / RST to set the desired countdown hours.
- *PRESS* MODE to advance to the countdown minutes setting.
  Set the desired minutes by *PRESSING* STR / STP or VIEW / RST.
- *PRESS* MODE to advance to the countdown seconds setting.
  Set the desired hours by *PRESSING* STR / STP or VIEW / RST.
- To save the new settings, *PRESS & HOLD* MODE for 3 seconds.

Using the Countdown Timer

- In COUNTDOWN TIMER mode, *PRESS* STR/ STP to begin the timer.
- With the countdown running, *PRESS* STR / STP to stop the timer.
- With the countdown stopped, *PRESS* STR / STP to restart the timer

OR

- **PRESS & HOLD** VIEW / RST to reset the timer to set values.

NOTE: When countdown reaches 10 seconds, a beep will sound each second until the timer reaches zero.

NOTE: When the countdown reaches zero, there will be 15 triple beeps to signal the end of the countdown. The timer will automatically reset to preset value.

Symbols & Meanings

symbol	what it means	symbol	what it means
◁ *ZONE*	Heart Rate is Below Selected Target Zone	♥	Heart Rate Reading is Detected
ZONE ▷	Heart Rate is Above Selected Target Zone	%	Heart Rate as a Percentage of Calculated Maximum Heart Rate
▷ZONE◁	Heart Rate is in Selected Target Zone	⊲	Hourly Chime is Active
MAX	Maximum Heart Rate for Workout	(((•	Daily Alarm is Active
AVG	Average Heart Rate for Workout	▭	Low Battery Warning

Target Heart Rate Zones
The Duo Sport allows you to select from three PRESET Target Heart Rate Zones andone CUSTOMIZABLE Target Heart Rate Zone. The Duo Sport has the ability to track your time IN, ABOVE and BELOW your selected Target Heart Rate Zone during your workout session and has visual and audible ZONE ALARMS to let you know when to push harder or slow down.

Preset & Customizable Target Heart Rate Zones
The preset zones below are based on the following % Max Heart Rate equation:
Maximum Heart Rate = 220 - current age
Example: (35 years old) 220 - 35 = 185. To calculate the percentages, multiply 185 by either 0.5, 0.65, 0.75 or 0.85 to see the LO and HI levels for each zone.
HEALTH ZONE: (Light Intensity Workout) 50% Max HR (LO) and 65% Max HR (HI)
FAT BURN ZONE: (Medium Intensity Workout) 65% Max HR (LO) and 75% Max HR (HI)
AEROBIC ZONE: (Heavy Intensity Workout) 75% Max HR (LO) and 85% Max HR (HI)
USER ZONE: You can customize this heart rate zone to fit your workout needs.

NOTE: You can view the % Max value change as you modify the LO and HI zone values.

Setting Heart Rate Target Zones & Alarms
NOTE: The three preset target heart rate zones (mentioned above) can be altered to fit your needs. Edit the Lower and Upper Heart Rate Zone Values (as noted in the below setting sequence) as needed.

- In HRM / CHRONO mode, **PRESS & HOLD** MODE for 3 seconds until the display flashes.
- **PRESS** STR / STP or VIEW / RST to toggle through the zone options (HEALTH, FAT BURN, AEROBIC, USER).
- Once the zone is selected, **PRESS** MODE to advance to the ABOVE ZONE alarm setting. **PRESS** STR / STP or VIEW / RST to toggle the alarm ON / OFF (--).
- **PRESS** MODE to advance thru the remaining HRM / CHRONO mode settings and STR / STP or VIEW / RST to edit the values:
  • Below Zone Alarm
  • Lower Heart Rate Zone Value
  • Upper Heart Rate Zone Value
 • Personal Activity Level (High, Low, Medium)

NOTE: With the ABOVE ZONE and/or BELOW ZONE alarms active, an audible beep will sound if you are working outside of your selected Target Heart Rate Zones.
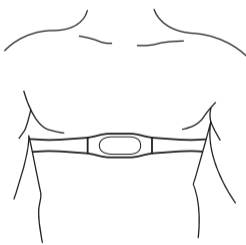
Using the Heart Rate Transmitter
The heart rate transmitter strap consists of two conductive electrodes attached to a small radio transmitter housed in the center of the strap. The electrodes sense the electrical potential created each time your heart contracts and the radio transmitter sends a signal to the watch each time the electrodes sense the heart beat.

ELECTRODES

The transmitter should be worn around the rib cage, just below the pectoral muscles. The elastic strap of the system should be adjusted so that it is snug enough so it does not move during use, but not so tight as to restrict breathing.
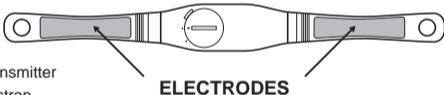
While the wearing of the transmitter strap may feel a bit strange initially, most people become used to it within a few days and cease to even notice they are wearing it.

Checking the Heart Rate Signal
- Ensure that the chest strap is positioned properly (as noted above), then **PRESS** MODE until you enter HEART RATE / CHRONOGRAPH mode.
- The bottom line in the display is dedicated to your heart rate information. Your current bpm (beats per minute) is displayed alongside the % Max of your current bpm . If there are dashes in the bottom line, please check your chest strap position.

NOTE: See troubleshooting for additional information.

Measuring your Heart Rate via Finger Touch
A heart rate reading can be taken in any mode and at any time by following these steps:
- Strap the watch snugly around your wrist.

NOTE: The watch must be placed on the wrist while touching the heart rate sensor areas on the bezel to complete the circuit and obtain a reading.

- As shown in the diagram, place your finger on the metal bezel in the heart rate sensor area for 3-8 seconds.
- Once detected, a beep tone sounds and your heart rate will be displayed in beats per minutes (bpm).

NOTE: This unit is a sensitive monitoring device that reads your EKG signals and reading time may vary. If you do not get a reading in 3-8 seconds, wait a few minutes and try again.

NOTE: Your heart rate will be displayed once measured, and remain displayed for 6 seconds after you remove your fingers from the sensor areas.

NOTE: Continue to touch the sensors after your initial reading for a continuous display of your heart rate reading.
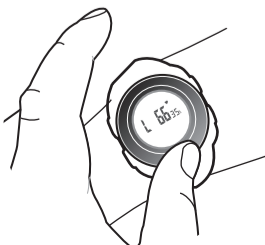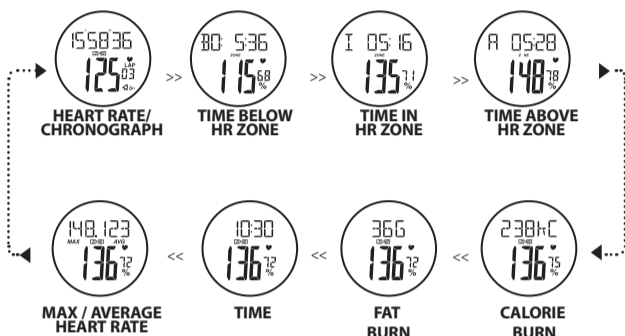
Helpful Hints for Measuring Heart Rate

- Make sure the watch is snugly strapped to your wrist.
  A loose fit makes it more difficult to properly measure your heart rate.
- When pressing on the two sensors, make sure that you are using the soft, flat pads of your fingers, not the tips of your fingers.
- Press gently, but with enough pressure to activate the heart rate measure mode. Muscle 'noise' from pressing too hard can make it difficult to measure your heart rate.
- Make sure the metal back of the watch is laying flat on your skin.
- Make sure your wrist and fingers are clean and free from dirt, oils or lotions.
- Stay still & relax your arms on a stable surface while taking your heart rate.
- Clean the bezel sensor area and back metal plate with soft, dry cloth.
- Moisten the pads of the fingers you are using with water before you press to contact the sensor areas on the metal bezel of the watch.
- Moisten the surface between the back metal plate of the watch and the skin on your wrist with water.

HRM / CHRONO Screen Options

The Duo Sport has 8 display options for HRM / CHRONO mode:
NOTE: If the watch is not receiving a signal from the transmitter, the middle display will only show dashes. Check your chest strap position and/or check the link (as noted earlier).

- *PRESS* VIEW / RST to toggle through the HRM / CHRONO screen options.

| HEART RATE/ CHRONOGRAPH | TIME BELOW HR ZONE | TIME IN HR ZONE | TIME ABOVE HR ZONE |
| MAX / AVERAGE HEART RATE | TIME | FAT BURN | CALORIE BURN |

Operating the Chronograph

The Duo Sport is equipped with a 10-Hour, 25 Lap/Split Chronograph.

- In HRM / CHRONO mode, *PRESS* STR / STP to start the chronograph.
- To time a lap/split, *PRESS* STR / STP. The lap/split time will display for 5 secondsand the lap number will flash on screen, then the timing will resume.
- To stop timing, *PRESS & HOLD* STR / STP for 3 seconds.
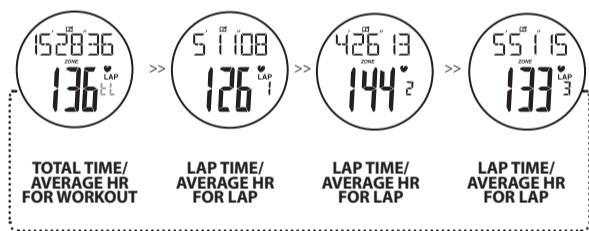- To reset (clear) the chronograph, *PRESS & HOLD* VIEW / RST for 3 seconds.

IMPORTANT: If you reset (clear) the chronograph, it will DELETE the data in the HRM / CHRONO MEMORY mode.

View HRM / CHRONO Memory

The Duo Sport features a MEMORY mode for viewing average heart rate and run data recorded during your last workout. In this mode, a small logbook icon will appear at the top of the screen. 📖

REMEMBER: If you reset (clear) the chronograph in HRM / CHRONO mode, it will DELETE the data in the HRM / CHRONO MEMORY mode.

- In MEMORY mode, the first screen will display information for your TOTAL workout:
  TOTAL exercise time (chronograph), Average Overall Heart Rate and TOTAL number of Laps/Splits during your run.
- *PRESS* STR / STP or VIEW / RST to toggle through the individual lap/spilt data:
  LAP exercise time (chronograph), Average Heart Rate for the LAP and LAP number.

| TOTAL TIME/ AVERAGE HR FOR WORKOUT | LAP TIME/ AVERAGE HR FOR LAP | LAP TIME/ AVERAGE HR FOR LAP | LAP TIME/ AVERAGE HR FOR LAP |

Power Off Mode

To conserve the battery's lifetime during long periods of inactivity:

1. In TIME mode, *PRESS & HOLD* all four side buttons for 5 seconds.
   The watch will turn off and enter Power Off Mode.
2. To activate the watch again, *PRESS* ANY BUTTON.

Using the Backlight

The watch is equipped with an electroluminescent (EL) backlight system for viewing the display in low light conditions.

- *PRESS* LIGHT in any mode to activate the backlight.

NOTE: Excessive use of the EL Backlight may significantly reduce battery life.

Care and Maintenance

- **NOTICE TO PEOPLE WEARING PACEMAKERS**: While the heart rate monitor is a passive system and should have no direct effect on a pacemaker, we strongly recommend anyone fitted with such a device contact their physician or cardiologist before using this product or starting an exercise program.
- **NEVER** push the buttons underwater, when the watch is wet or when you are cleaning or rinsing the unit. You are actually pushing water inside the watch.
- **DO NOT** use the watch in a hot tub or extremely hot shower / bath. High temperatures and steam can damage the rubber seals.
- **DO NOT** expose the watch to sudden changes of temperature. This can make the rubber seals contract and allow water to penetrate.
- **DO NOT** wear the watch in soapy dish water or bubble baths. The alkali contained in soaps can damage the rubber seals.
- **ALWAYS** rinse the watch with clear tap water after exposure to salt water. Salt is highly corrosive and can damage both the rubber seals and the watch case.
- **PROTECT** the Duo Sport from extreme heat, shocks and excessive exposure to direct sunlight.
- **NEVER** expose the Duo Sport to strong chemicals such as gasoline, cleaning solvents, acetone, alcohol, insect repellent, sunscreen, hair spray and other toiletries, as they may damage the unit. The Duo Sport can be wiped clean with a lightly moistened cloth.

Troubleshooting the Watch

The watch is a very sensitive and sophisticated instrument. If properly cared for it should last and remain accurate for many years. It has been our experience that the majority of the problems seen by consumers with products such as this are related to dead or dying batteries. While the estimated life of a fresh battery in the watch is approximately one year, this can be shortened considerably if the backlight feature of the watch is used extensively. Whenever you are experiencing issues related to the function of the unit, it is recommended that you reset the watch to factory settings as a first course of action.

Resetting the watch to factory settings
- *PRESS & HOLD* all four buttons simultaneously for 5 seconds.
- The watch will automatically reset to factory defaults.

IMPORTANT: Resetting the watch will erase ALL stored settings and workouts.

NOTE: If the reset does not solve the issue, it is likely time to replace the battery. BE AWARE: Lithium batteries of the type used in this watch are very susceptible to improper storage.Many times, batteries purchased as new are dead or weak before they are purchased. Do not assume that batteries in stores are good. If you try a new battery and problems persist, please try a second battery from another source, just to be certain.

Indications of a weak battery are:
- A fading or blank display. If the display goes blank when the backlight is operated and comes back on when the backlight system turns off, this is a common indicator that the battery is low.
- Inaccurate readings from the heart rate systems - extremely high or low readings.

Troubleshooting & Care of the Heart Rate Transmitter

Ensure Proper Placement & Alignment of Transmitter on Chest
If you are not getting a good connection, you may be wearing the transmitter too high or too low on the chest. Adjust the position on the chest to see if the connection changes to satisfactory results.You may be experiencing issues with connection due to interference with workout shirts, under garments or sports bras. Ensure that the transmitter is 100% in contact with the skin and not on top of any clothing.

Cross-talk
Exercising in close proximity to other people using heart rate monitors may cause your watch to pick up signals from chest straps other than your own. This is known as cross-talk. To avoid problems associated with cross-talk it is recommended that you separate yourself from others wearing heart rate monitors by a minimum of 3 feet or 1 meter in all directions.

Transmission Range
The heart rate monitor system has an effective range of 28 - 30 inches (.75 meters). If the monitor is separated from the transmitter strap by a greater distance than this, you may not be able to receive a heart rate signal.

Change Battery in Transmitter
If all other topics have been eliminated, it is likely time for a battery change on the transmitter (see below).

Care of the Heart Rate Transmitter
- After every use you should wipe the plastic transmitter with water and dry with a dry cloth.
- After every use you should clean the elastic strap in warm soapy water and air dry.
- Do not store the transmitter when wet as this may shorten the battery life.
- The transmitter should be stored flat rather than folded and should never be bent or stretched as this may damage the electrodes.
- Never lay your heart rate transmitter on a metal surface, as this will quickly drain the battery.

Watch Water Resistance:

50 Meters / 5 ATM / 5 BAR

Suitable for surface swimming and bathing

NOTE: Environments with steam or extremely high humidity levels could cause water damage.

NOTE: Water damage may occur if buttons are pressed underwater.

HR Transmitter Water Resistance:

30 Meters / 3 ATM / 3 BAR

NOTE: Environments with steam or extremely high humidity levels could cause water damage.

Watch Battery: CR2032
DO NOT remove the screws and open the caseback. To ensure water resistance, all battery replacement should be completed by a trained watch repair technician.

NOTE: Keep watch batteries away from children and pets.

NOTE: This product contains a button-cell battery. If swallowed contact physician immediately; severe damage or death may occur.

NOTE: Watch batteries contain chemical substances. They should be disposed of properly under local regulations.

NOTE: Lithium Batteries contain Perchlorate Material. In California, special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate.

HR Transmitter Battery: CR2032
Due to a lower battery life than the watch, the Heart Rate Transmitter has an user replaceable battery hatch.
NOTE: The battery hatch is plastic and can be easily damaged by applying too much pressure on the coin slot.
For best results, it is also recommended that you employ the assistance of a trained repair technician to replace the transmitter battery. Otherwise, take extreme care not to over-turn the battery hatch in either direction or you might damage the plastic battery hatch.
- Using a coin, turn the battery hatch counter-clockwise to open the caseback.
- Remove the battery hatch. Take extreme care not to displace the rubber o-ring within the battery cavity. This will compromise the water resistance of the transmitter.
- Remove the old CR2032 battery and replace with a new CR2032.
- To avoid damage, please ensure the battery is installed correctly (POLARITY).
- Gently press the battery hatch down into the battery cavity until it is even with the caseback surface.
- Gently turn the battery hatch clockwise to the original position.

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