▌ Thank You

Read this before Using

ALATECH Technology Limited sincerely thanks you for choosing **ALATECH** Heart Rate Monitor (HRM).

To correctly operate and efficiently use this product, please read this manual in detail, and retain it for future reference.

Package Contents
- Heart Rate Monitor Wrist Watch
- Heart Rate Transmitter (include elastic belt)
- User Manual
- Warranty Certificate

Warning
- This product is only used in general application, not suitable for medical treatments.
- The figures on the monitor are generated through accurate measurement.
- ALATECH does not take lawful responsibility for any loss and compensation caused by this product.
- ALATECH reserve all rights to update any specifications of hardware and software described in the user manual without any early notice.

Content

Getting Acquainted

The HRM watch is designed to measure and display your heart rate during your exercise. It is also capable of recording your total exercise time and calories consumption of each exercise within a personal training intensity, which is custom through User Settings and helpful solution to your targeted workout state.

Keys There are 4 function keys totally on this watch:

ESC/LIGHT
- To return to the main screen.
- To turn on the backlight.*
- To end workout.

RESET/+
- To search forward for a mode/ menu.
- To increase the flashing figures.

ENTER/OK
- To go into the selected mode/ menu.
- To locate on the flashing item.
- To start workout.

START/-
- To search backward for a mode/ menu.
- To decrease the flashing figures.

A 11-04-08 C
B FRI 12:38 PM 55 D

EXE / MEM / USER
TIMER / ALM / TIME

* Long press A, the backlighting can continue for about 2 seconds. The illumination will perform no good under direct sunlight.

Main Screen

The main screen includes:

EXE / MEM / USER → Main Menu

11-04-08 → Date (Year-Month-Date)

FRI → Day of the Week

Alarm
HRM

12:38 PM 55 → AM/PM

→ Time (Hour:Minute:Second)

TIMER / ALM / TIME

Switch to Function Screen

This watch provides you 6 kinds of function modes such as Exercise, Memory, User Settings, Timer, Alarm and Time. Please use key C or D to access to one of function modes in the navigation menu bar, and then press B into the selected mode.

Main Screen

Time Display.

EXERCISE

114~133
LIGHT

Light Zone.
Moderate Zone.
Hard Zone.
HR-SET Zone.
Target Kcal Zone.
Target Time Zone.
Exercise Duration.
Calories Consumption.
Maximum HR.
Average HR.

MEMORY

MEMORY
FILES

Memory File.
Memory Delete.
Memory Statistics.

USER SETTINGS

UNIT
CM/KG

Set Unit, Gender, Age, Height, Weight, HRmax.
Turn HR Alarm on.
Perform the VO2max Test.

TIME

07-02-05
Y-M-D

Adjust Time.
Set Date.

ALARM

ALARM
OFF

Turn Alarm on.
Set Alarm Time.

TIMER

STOP
WATCH

Stopwatch.
Countdown Timer.

After into your selected function mode, please refer below table to operate keys:

Mode \ Key	(A) ESC/LIGHT	(B) ENTER/OK	(C) RESET/+	(D) START/-
EXERCISE	Switch back to training intensity selection window.		Select forward on a training intensity.	Select backward on a training intensity.
	End workout and display results.	Start workout.	View related information during exercise.	Pause/ Re-Start.
	Return to the main screen.		View forward for the results of this workout.	View backward for the results of this workout.
MEMORY	Switch back to memory menu window.	Go into selected memory menu.	Select forward on a memory menu.	Select backward on a memory menu.
			Select next file.	Select previous file.
	Return to the main screen.	Go into selected memory file. Delete memory file.	View forward for recorded workout results of the selected file.	View backward for recorded workout results of the selected file.
USER SETTINGS	Return to the main screen.	Move to the next settings page.	Increase figures.	Decrease figures.
		Start VO2max Test.	Turn the Heart Rate Alarm ON or OFF.	Turn the Heart Rate Alarm ON or OFF.
TIMER	Switch back to timer menu window.	Confirm to go into Stopwatch or Countdown Timer.	Switch screen to Countdown Timer.	Switch screen to Stopwatch.
	Return to the main screen.	Locate on the next flashing item.	Split/ Split Release/ Clear. Set the start time (Increase figures). Reset to the start time.	Start / Stop/ Re-Start. Set the start time. (Decrease figures). Start/ Stop/ Re-Start.

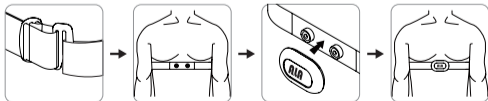| Mode \ Key	Ⓐ ESC / LIGHT	Ⓑ ENTER / OK	Ⓒ RESET / +	Ⓓ START / -
ALARM	Return to the main screen.	Locate on the next flashing item.	Increase figures. Turn the alarm ON or OFF.	Decrease figures. Turn the alarm ON or OFF.
TIME	Return to the main screen. Illuminate the display.	Locate on the next flashing item.	Increase figures. Select on a desired date display format. Switch to 12H/24H.	Decrease figures. Select on a desired date display format. Switch to 12H/24H.

Steps to Wear the Transmitter (CS005):

1. Adjust the elastic belt for a proper length for a snug fit your body.

   Attach one end of the Transmitter to the elastic belt.

2. "ALA" logo of CS005 should face outwards.

3. Buckle the CS005 to the two strap snaps.

Note: Please be sure that CS005 fit tightly with transmitter belt to avoid

   slipping during your workout.

* *If the device cannot receive the heart rate signal, the heart rate value for the HRM displayed will change into zero in about 15 seconds, and after 60 seconds the screen will automatically go to the exercise results display. When this situation happens, please re-check whether the Transmitter is still tight and fit with your body or whether the two electrode areas on the reverse of the Transmitter are well moistened.*

- *If the device cannot receive the heart rate signal, the heart rate value for the HRM displayed will change into zero in about 15 seconds, and after 60 seconds the screen will automatically go to the exercise results display. When this situation happens, please re-check whether the Transmitter is still tight and fit with your body or whether the two electrode areas on the reverse of the Transmitter are well moistened.*

With reference to Training Intensity

The table below is for your reference to find or calculate your exercise intensity of bpm[1] (which is also called training heart rate) in the Exercise Mode, being suit to your workout. It is estimated based on age in 5-year intervals and calculated by the %HRmax formula.

Age	HRmax[2]	Training Intensity[3] (unit: bpm[1])		
	(unit: bpm[1])	Light Zone[4] (60~70 %HRmax)	Moderate Zone (70~80 %HRmax)	Hard Zone (80~90 %HRmax)
10~20	200	120~140	140~160	160~180
25	195	117~137	137~156	156~176
30	190	114~133	133~152	152~171
35	185	111~130	130~148	148~167
40	180	108~126	126~144	144~162
45	175	105~123	123~140	140~158
50	170	102~119	119~136	136~153
55	165	99~116	116~132	132~149
60	160	96~112	112~128	128~144
65~99	155	93~109	109~124	124~140

1. Heart rate (abbreviated as "HR") is calculated as the number of heart beats in one minute and expressed as "beats per minute, bpm".
2. HRmax = 220 — Age
   Maximum Heart Rate (MHR), or **HRmax**, which is the highest number of heart beats per minute (bpm) during maximal physical exertion. It is frequently used to calculate THR (which is a helpful index when prescribing your training intensity range). The most accurate way of measuring HRM is via an Exercise Stress Test by an electrocardiogram (ECG) in the laboratory with the presence of experts or doctors. Instead, "Age Formula" is the common way to estimate MHR.

3. %HRmax = Target Heart Rate = percentage of exercise intensity (%) × HRmax
   Target Heart Rate (THR), or **Training Heart Rate**, which is a desired range of heart rate reached during aerobic exercise for one's heart and lungs to receive the most benefit from a workout. You can calculate the limits of the lower and upper range for THR via the "%HRmax Formula".
4. The individual which has less physical strength would be suggested to exercise with the Light zone, and its lower limit may reach lower than 60%HRmax.

Exercise Mode

Exercise Mode provides 6 optional training intensity programs for you to choose or manually set your own training intensity. You also can view the current exercise information and results during or after workout in this mode.
For the first time use, please start from User Settings on page 19~23 to enter your personal data on this watch. Before operating Exercise Mode, first place the Transmitter below your chest (see the steps on page 9), also depend on your physical strength condition and fitness goal to use one suitable training intensity* for your workout.
The table on page 15 introduces the 6 training programs included its intensity and uses to you.

> *Please refer to page 10 and the table on page 15 to learn about training intensity and calculate your Target Heart Rate for workout.*

To enter or exit Exercise Mode
1. Under main screen, use C or D to switch the menu bar to ⬛EXE, and then press B into Exercise Mode window.
2. Press A repeatedly in the Exercise Mode to switch back to the main screen.

Choosing a program and making the measurement
1. According to the below flow diagram, use C or D to choose a suitable training intensity.

114~133 LIGHT	D←→C	133~152 MOD.	D←→C	152~171 HARD
Light Zone		Moderate Zone		Hard Zone
TARGET TIME	D←→C	TARGET Kcal	D←→C	114~171 HR-SET
Target Exercise Time Zone		Target Burned Calories Zone		Training Heart Rate Zone

2. Press B to start workout.
3. Use D repeatedly, you could pause or continue with measuring.
4. Directly press A to end and complete your workout.
5. Then use C or D to check the on-screen results information. (You have to workout continually at least 1 minute so that the exercise

results can be displayed on the screen.)

AVG120 MAX140		01:20:00		500 Kcal
Average Heart Rate Maximum Heart Rate	C / D	Total Exercise Duration (HH:MM:SS)	C / D	Total Burned Calories
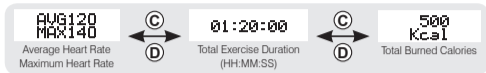
How to check the proceeding information while exercise measuring

During exercise measuring, you could use C for viewing the Target Heart Rate Limits of selected intensity and other on-screen current updated information as below:

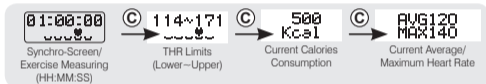| 01:00:00	114~171	500 Kcal	AVG120 MAX140
Synchro-Screen/ Exercise Measuring (HH:MM:SS)	THR Limits (Lower~Upper)	Current Calories Consumption	Current Average/ Maximum Heart Rate

Manual Setting for Training Heart Rate in HR-SET program

1. Use B to locate the flashing item on either one of the lower or upper limits.
2. Use C or D to adjust the figures, and then press B to start workout.

Manual Setting for Target Burned Calories in TARGET KCAL* program

1. Use B to locate the flashing number on any one of the first three figures.
2. Use C or D to adjust the figures, and then press B to start workout.

 * *In the Target KCAL program, the final exact calories consumption could be 7~8% more than the original manual settings, according as different individual condition.*

Manual Setting for Target Exercise Duration in TARGET TIME program

1. Use B to locate the flashing item on either one of hour or minute.
2. Use C or D to adjust the figures, and then press B to start workout.

- *There is a heart-shaped icon at the bottom side of the exercise synchro-screen like this " ♥ 𝟬𝟬 " , flashes along with your displayed heart rate value.*

- *If the device cannot receive the heart rate signal, the heart rate value for the HRM watch displayed will change into zero " 𝟬𝟬 " in about 15 seconds, and after 60 seconds the screen will automatically go to the exercise results display. When this situation happens, please re-check whether the Transmitter is still tight and fit with your body or whether the electrode areas on the reverse of the Transmitter are well moistened.*

- *When the bitmap heart symbol " ♣ " moves to the most right side ⌣⌣⌣⌣♣ and starts to sound "Beep- Beep-" that means your heart rate is above the upper limits of the selected training intensity. We recommend you should consider to adjust your exercise intensity (from difficult to easy) to prevent the risk of exercise-induced tachycardia.*

- *If the preset Target KCAL or Target Time has been reached, a trophy icon 🏆 first shows up as a prize for you, with sounds of "Beep- Beep-" for about 10 seconds and meanwhile, the exercise results automatically displaying on the screen, please press C or D to view the inside information.*

- *The exercise results only functions as the exercise time reaches for at least one minute.*

- *Exercise duration measuring unit: 1 minute, measuring capacity: 24 hours.*

- *Heart rate display unit: 1 bpm, display range: 40~230 bpm.*

Intensity Name	Description
114~133 LIGHT (Light zone)	**Intensity:** 60~70% of HRmax. **Orientation:** Health improvement and weight control. **Advantage:** It can improve one's physical fitness, energy expenditure, and burning efficiency of body fat and carbohydrates.
133~152 MOD. (Moderate zone)	**Intensity:** 70~80% of HRmax. **Orientation:** Aerobic exercise and advanced fitness training. **Advantage:** It is better recommended option for frequent exerciser. It can help stimulate and enhance your cardiorespiratory endurance and transform body carbohydrates into the energetic source for physical strength.
152~171 HARD (Hard zone)	**Intensity:** 80~90% of HRmax. **Orientation:** Athletics training. **Advantage:** It is better recommended for exercisers who are able to do high level intensity and short time athletics exercise as it may cause tight breathing and muscle stress. It can help increase your athletic exercise capability.
114~171 HR--SET (HR-SET zone)	**Manual Setting for Training Heart Rate:** depending on your setting. **Orientation:** This manual setting allows you to determine your own maximum intensity range on the lowest and highest limits of the training heart rate. You may check the enclosed table on page 10 for easy reference to estimate the THR limits with the age and %HRmax formula.
TARGET Kcal (Target KCAL zone)	**Manual Setting for Target Burned Calories:** depending on your setting. **Orientation:** This manual setting allows you to determine your own desired target of burned calories to exercise. It is a kind of reference utility to help you achieve weight loss goal.
TARGET TIME (Target Time zone)	**Manual Setting for Target Exercise Time:** depending on your setting. **Orientation:** This manual setting allows you to set a certain period of time for an exercise. When the timer counts down to zero, this watch will sound "Beep- Beep-" for about 10 seconds as reminder. It is helpful if you would like to keep your workout regularly with quantitative time.

Memory Mode

This watch has 3 memory functions to automatically store every exercise result in dated order, whenever you want to review these saved records. Introducing as below:

Function Name	Description
MEMORY FILES	**Memory Files** enables to save up to 24 most recent exercise results which are stored by date for you, giving you a convenience to find and review the contents of exercise average heart rate, duration and calories consumption in each single saved record.
MEMORY STAT.	**Memory Statistics** is where you can gather several saved Memory Files into statistics for a certain period of time, in order to discover your total cumulative exercise count, duration and burned calories. It is helpful to understand how your fitness progressed over the long-term.
MEMORY DELETE	**Memory Delete** enables you to quickly remove all memory files at one time. Please note that executing this function unless you are very certain to eliminate all saved files from the memory storehouse.

To enter or exit Memory Mode
1. Under main screen, use C or D to switch the menu bar to MEM , and then press B into Memory Mode window.
2. Press A repeatedly in the Memory Mode to switch back to the main screen.

To view or delete one of the saved records with Memory Files
1. In the Memory Mode, use C or D to switch the screen to MEMORY FILES, and then press B into Memory Files window.
2. In the Memory Files*, use C or D to choose any one single file from the dated records in numerical order.
3. Then press B to go into the selected file for viewing inside information.
4. Use C or D to view the recorded information of this file, according to the flow diagram:
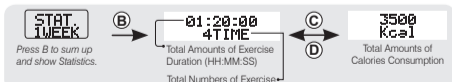
07-02-05 FILE01	B	AVG120 01:20	C	500 Kcal	C	DELETE FILE
Press B to go into the selected file.		Average Heart Rate Exercise Duration (HH:MM)	D	Calories Consumption	D	Delete This File

5. When the screen switched to DELETE FILE, press B you can delete the selected file immediately, with that an animation of trash can 🗑 is displaying. Then the next file will show on the screen automatically.

 * *The Memory Files contains as many as up to 24 of the most recent exercise results records. When the Memory Files becomes full, the oldest file will be excluded by a latest one.*

The use of Memory Statistics

Period	Description
1WEEK	During the most recent one week
2WEEK	During the most recent two weeks
3WEEK	During the most recent three weeks
1MONTH	During the most recent one month
2MONTH	During the most recent two months
TOTAL	Sum up all your exercise results

1. In the Memory Mode, use C or D to switch the screen to MEMORY STAT., and then press B into Memory Statistics window.
2. Memory Statistics* enables you to sum up several Memory Files for a certain period of time. Use C or D to access to one statistical period (see the above table).
3. Then press B to do the summation.
4. Use C or D to view the showed Statistics through the selected period, according to the below flow diagram:

STAT. 1WEEK	B	01:20:00 4TIME	C	3500 Kcal
Press B to sum up and show Statistics.		Total Amounts of Exercise Duration (HH:MM:SS) Total Numbers of Exercise	D	Total Amounts of Calories Consumption

 * *The Memory Statistics enables summation as many as up to 24 of exercise results records.*

To remove all saved files with Memory Delete

1. In the Memory Mode, use C or D to switch the screen to $\text{\tiny MEMORY DELETE}$ and then press B into Memory Delete window.

2. Press B* to confirm the asking message $\text{\tiny DEL ALL FILES}$ to remove all Memory Files and its information from the memory storehouse at one time, with that an animation of trash can " 🗑 " is displaying. Then the screen will return to the screen $\text{\tiny MEMORY DELETE}$ automatically.

   * *You can also press A twice to exit, if you are not sure whether executing elimination or not.*

User Settings

User Settings allows you to set and manage a variety of user data and references, including age, weight, height… , see the below flow diagram. Please note that it is important to be precise with the settings, as they have an impact on the accuracy of your VO2max measurement, Target Heart Rate Limits in the intensity zones, and calories consumption calculation.
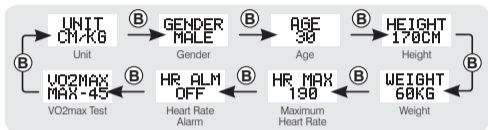
To enter or exit User Settings
1. Under main screen, use C or D to switch the menu bar to **USER**, and then press B into User Settings window.
2. Use B to move to the next setting page. (Please refer to the above flow diagram)
3. Press A repeatedly in the User Settings to switch back to the main screen.

Unit Setting: CM/ KG or FT/ LB

	FT/LB	CM/KG
Weight	Pounds	Kilograms
Height	Feet/ Inches	Centimeters

1. Press C or D to select the measurement units* of weight and height as you need.
2. Then press B to go to the next Settings.

The Unit you chose and confirmed will be applied in all modes.

Gender Setting: MALE or FEMALE
1. Use C or D to enter your gender type on this watch.
2. Then press B to go to the next Settings.

Age Setting
1. Use C or D to enter your age* on this watch.
2. Then press B to go to the next Settings.

 * *The initial factory defaults of user age is 30 years old. The setting range is from 10 to 99 years old.*

Height Setting
1. Use C or D to enter your height* on this watch.
2. Then press B to go to the next Settings.

 * *The initial factory defaults of user height is 170 cm (5 feet 6 inch). The setting range is from 140 to 200 cm (from 4 feet 7 inch to 6 feet 6 inch).*

Weight Setting
1. Use C or D to enter your weight* on this watch.
2. Then press B to go to the next Settings.

 * *The initial factory defaults of user weight is 60 kg (133 lbs). The setting range is from 40 to 120 kg (from 89 to 265 lbs).*

Manual Setting for Maximum Heart Rate (HRmax)
1. Use C or D to adjust the HRmax value which is automatically calculated by program if necessary*.
2. Then press B to go to the next Settings.

 * *Please note it is recommended that you change the HRmax value only when you know your laboratory-measured value by a doctor or expert.*

 * *This watch can produce the HRmax value automatically via a typically age formula: **HRmax = 220 — Age***

HR Alarm: ON or OFF
1. Use C or D to switch the Heart Rate Alarm ON* or OFF.
2. Then press B to go to the next Settings.

 * *If the HR Alarm is on, during your workout, when your heart racing over the upper limit of selected training intensity, the alarm will start to sound "Beep-Beep-".*

VO2max Test (Maximal Aerobic Power)

Your own VO2max value is displayed on the screen by automatic calculations, which is the last option at the back of HR Alarm.

VO2max (Maximal Oxygen Uptake) is also called **Maximal Aerobic Power**. It is a common description for the assessment of one's physical fitness of cardiorespiratory endurance (CR Fitness). CR Fitness refers to cardio-pulmonary vascular system in the body of oxygen transport and the use of physical activity as the ability to use.

If you have the right to complete the set of personal data, this watch will automatically estimate your Maximal Aerobic Power and display the results on the screen. To be able to get more accurate VO2max value, you can perform the VO2max Test by this watch.

Please refer to the following notes and steps to have the VO2max Test.

1. Please see the steps on page 9 to place the Transmitter below your chest and make sure you feed data into the User Settings completely and correctly, before the test also pay attention on the following details:
   1-1. No smoking and excess food in 2~3 hours before the test. The day before the test, avoid alcohol beverages, medicament and heavy physical effort.
   1-2. The test should be performed at a quiet environment without disturbing noises, such as TV, telephone, radio, people talking and etc.
   1-3. In order to effectively receive your heart rate, please make sure the transmitter is well fit on your body and well moistened with water.
   1-4. Lie down and relax for 1~2 minutes before the test.
   1-5. The VO2max Test takes about 3~5 minutes. Be suggested to keep your body lay flat, limit body movements or talk with people when you are in the test.

2. Go on the following steps for taking the VO2max Test:
   2-1. In the window of the VO2max value (VO2MAX MAX -45), please refer to the Physical Activity Status Scale (PAR) and use C or D to switch the screen for picking an ACT grade* from 00 to 10.
   2-2. Then press B to start the test.
   2-3. When the test is in process if you want to discontinue, press A to skip the test.

2-4. When the test is at an end, the results will be display on the screen automatically.

The ACT Grade you chose should be the most average description of your daily activity levels over the past one month.

Physical Activity Status Scale (PAR)

Grade	Description
Sedentary to Light Exercise	
ACT-00	Avoid walking or exertion, e.g., always use elevator, drive whenever possible instead of walking.
ACT-01	Walk for pleasure, routinely use stairs or occasionally exercise sufficiently to cause heavy breathing or perspiration.
Recreational Activity (golf, bowling, yard work)	
ACT-02	10 to 60 minutes per week.
ACT-03	Over one hour per week.
Heavy Aerobic Exercise (run or brisk walking or comparable activity, such as basketball, tennis, racquetball, aerobic dance...)	
ACT-04	Run about 1 mile per week or walk about 1.3 miles per week or spend about 30 minutes in comparable physical activity.
ACT-05	Run 1 to 5 miles per week or walk about 1.3 to 6 miles per week or spend 30 to 60 minutes per week in comparable physical activity.
ACT-06	Run 6 to 10 miles per week or walk about 7 to 13 miles per week or spend in 1 to 3 hours in comparable physical activity.
ACT-07	Run 11 to 15 miles per week or walk about 14 to 20 miles per week or spend in 4 to 6 hours per week in comparable physical activity.
ACT-08	Run 16 to 20 miles per week or walk about 21 to 26 miles per week or spend in 6 to 8 hours per week in comparable physical activity.
ACT-09	Run 21 to 25 miles per week or walk about 27 to 33 miles per week or spend in 9 to 11 hours per week in comparable physical activity.
ACT-10	Run over 25 miles per week or walk over 34 miles per week or spend over 12 hours per week in comparable physical activity.

Source: National Aeronautics and Space Administration.

Percentile Value for Maximal Aerobic Power

Maximal Aerobic Power can improve with training and decrease with age, world class athletes typically have high VO2max. Research suggests that the VO2max below the 20th percentile for age and sex, which is often indicative of a sedentary lifestyle, is associated with an increased risk of death from all causes.

You can compare your own VO2max value measured by this watch with the reference list of men and women as bellow for better understanding of your health status.

Percentile Value for Maximal Oxygen Uptake in Men (unit: ml/kg/min)

Percentile	Age				
	20~29	30~39	40~49	50~59	Over 60
90	55.1	52.1	50.6	49.0	44.2
80	52.1	50.6	49.0	44.2	41.0
70	49.0	47.4	45.8	41.0	37.8
60	47.4	44.2	44.2	39.4	36.2
50	44.2	42.6	41.0	37.8	34.6
40	42.6	41.0	39.4	36.2	33.0
30	41.0	39.4	36.2	34.6	31.4
20	37.8	36.2	34.6	31.4	28.3
10	34.6	33.0	31.4	29.9	26.7
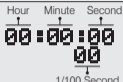
Percentile Value for Maximal Oxygen Uptake in Women (unit: ml/kg/min)

Percentile	Age				
	20~29	30~39	40~49	50~59	Over 60
90	49.0	45.8	42.6	37.8	34.6
80	44.2	41.0	39.4	34.6	33.0
70	41.0	39.4	36.2	33.0	31.4
60	39.4	36.2	34.6	31.4	28.3
50	37.8	34.6	33.0	29.9	26.7
40	36.2	33.0	31.4	28.3	25.1
30	33.0	31.4	29.9	26.7	23.5
20	31.4	29.9	28.3	25.1	21.9
10	28.3	26.7	25.1	21.9	20.3

Data were obtained from the initial examination of apparently health men and women enrolled in the Aerobics Center Longitudinal Study(ACLS), 1970 to 2002.

Timer Mode

Timer Mode provides you two functions: Stopwatch and Countdown Timer.

Function Name	Description	
STOP WATCH	**Stopwatch** enables you to measure elapsed time, split times and two finishes.	Hour Minute Second 00:00:00 00 1/100 Second
COUNT DOWN	**Countdown Timer** provides a countdown range of 1 minute to 24 hours. The alarm sounds "Beep-Beep-" as soon as the countdown ends at zero.	00:00:00 Hour Minute Second

To enter or exit Timer Mode

1. Under main screen, use C or D to switch the menu bar to **TIMER**, and then press B into Timer Mode window.
2. Use C or D to switch the screen to STOP WATCH or COUNT DOWN, and then press B to go into.
3. Press A* repeatedly in the Timer Mode to switch back to the main screen.

*If you press A to exit the Timer Mode while Stopwatch or Countdown Timer is measuring, a matrix capital letter **T** will be indicated in the main screen. To go back to Timer Mode, re-take and step 1 and 2.*

To measure time with the Stopwatch

1. To measure elapsed time:

(D)	→	**(D)**	→	**(D)**	→	**(D)**	→	**(C)**
Start		Stop		Re-Start		Stop		Clear

2. To measure split time:

(D)	→	**(C)**	→	**(C)**	→	**(D)**	→	**(C)**
Start		Split		Split Release		Stop		Clear

3. To measure two finishes:

(D)	→	(C)	→	(D)	→	(C)	→	(C)
Start		**Split**		**Stop**		**Split Release**		**Clear**
		First Runner Finishes.		*Second Runner*		*Display time of*		
		Display time of first runner.		*Finishes.*		*second runner.*		

- *Measuring unit: 1/100 second, measuring capacity: 23 hour 59 min 59.99 sec.*

- *The stopwatch continues to run, re-starting from zero after it reaches its limit, until you stop it.*

- *The stopwatch measuring automatically goes back to zero if the screen is changed to Exercise Mode or Countdown Timer.*

Setting the start time of Countdown Timer

1. After the screen is switched into Countdown Timer COUNT DOWN, use B to locate the flashing item on either one of the hour or minute.
2. Use C or D to set figures for the starting value, then press B.

The use of the Countdown Timer

1. Press D to start to countdown.
2. The countdown can be stop in the middle, and re-start, by pressing D.
3. If you would like to discontinue measuring, press D and then press C to reset the countdown to its starting value.
4. When the countdown ends at zero, the alarm can last for about 10 seconds until you press any key to stop it. Then, the countdown is reset to its starting value automatically.

- *Measuring unit: 1 second, the countdown start time setting range: 1 minute to 24 hours. (1-hour increments and 1-minute increments)*

- *For a measurement of 24 hours, the starting value should be set "* **00:00:00** *".*

- *The Countdown Timer automatically goes back to its starting value if the screen is changed to Exercise Mode or Stopwatch.*

Alarm Mode

Once you turn on alarm, the alarm sounds "Beep- Beep-" at the set time for about 20 seconds, or until you stop it by pressing any key.

To turn the alarm on and set the alarm time
1. Under main screen, use C or D to switch the menu bar to , and then press B into Alarm Mode window.
2. Use C or D to turn the Alarm ON or OFF.
3. Press B to locate the flashing item on either one of the hour or minute.
4. Use C or D to set figures.
5. When you're finished, press A repeatedly to switch back to the main screen.

• *If the Alarm is on, the alarm-on indicator ☾ is shown on the screen.*

Time Mode

Use the Time Mode to set and check the current time and date.

To set the time and date

1. Under main screen, use C or D to switch the menu bar to **TIME**, and then press B into Time Mode window.
2. Press B to locate on the flashing item you want to adjust. (see the below flow chart)
3. Use C or D to adjust or set.
4. When Y-M-D (Y-Year, M-Month, D-Date) and 12H is flashing, use C or D to select the display format as you want.
5. When you're finished, press A repeatedly to switch back to the main screen.
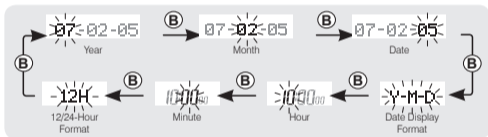
- *Full auto-calendar pre-programmed from year 2000 to 2099. The built-in full automatic calendar makes allowances for different month lengths and leap years.*
- *The calendar will be updated as the setting for the current date is complete.*
- *Once you set the date, there should be no reason to change it except when the battery power runs down. After renewed the battery, it is need to reset the current time, date, and other settings.*

Specifications

Heart Rate Monitor
- Module No.: M001A
- Operating temperature: 14ºF to 122ºF/ -10ºC to +50ºC
- Accuracy: better than ±2 seconds/day at temperature 77ºF/ 25ºC
- Water resistance
- Battery type: CR2032
- Battery life: average 22 months (in term of exercise with 1 h/day, 7 days/ week)
- Battery power indicator
- Illumination: EL Backlight

Calendar Clock
- Full auto-calendar pre-programmed from year 2000 to 2099
- Time display format: 12-hour(12H) or 24-hour(24H)
- Date display format: Y-M-D, M-D-Y or D-M-Y

Stopwatch
- Measuring unit: 1/100 second
- Measuring capacity: 23 hour 59 min 59.99 sec
- Measuring mode: Elapsed time, Split time or Two finishes

Countdown Timer
- Measuring unit: 1 second
- Starting value setting range: 1 minute to 24 hours (1-hour increments and 1-minute increments)

User Settings
- The weights and measures unit options: Metric system or U.S. customary units
- Gender options: Male or Female
- Age setting range: from 10 to 99 years old
- Height setting range: from 140 to 200 cm (from 4 feet 7 inch to 6 feet 6 inch)
- Weight setting range: from 40 to 120 kg (from 89 to 265 lbs)
- User HRmax display (program automatically calculated)

- Heart rate alarm: ON/ OFF
- User VO2max display (calculation and measurement with program)

Memory
- 24 recorded files for the most recent exercise results
- 6 kinds of statistical period for the sum of up to 24 files
- Deleting a file or removing all files one time

Exercise Heart Rate
- 6 kinds of training intensity options: Light, Moderate, Hard, Manual HR setting, Manual Target-Kacl setting, Manual Target-Time setting
- Heart rate display unit: 1 bpm (beats per minute)
- Heart rate measurement and display range: 40~230 bpm
- Heart rate accuracy: ±1 bpm at steady state
- Duration measuring unit: 1 minute
- Duration measuring capacity: 24 hours

Transmitter
- Product No.: CS005
- Operating temperature: 14°F to 122°F/ -10°C to +50°C
- Battery type: CR2032
- Battery life: about 800 hours
- Size: 64 x 40 x 12mm
- Weight: 57 g (include textile strap)

Maintenance

Taking care of the Heart Rate Monitor Wrist Watch
1. Keep the HRM away from extreme cold and heat. The suitable operating temperature is from 14ºF to 122ºF. (from -10ºC to +50ºC).
2. Do not expose the HRM to direct sunlight for extended periods.
3. The battery life depends on different HRM module, please refer to the specifications in the manual.
4. Clean the HRM with water or mild neutral detergent, and dry it with a soft towel. (Never use alcohol, any abrasive material or volatile agents).

Taking care of the Transmitter
1. The estimated average battery life of the Transmitter is about 800 hours.
2. If you use Transmitter of CS005 type with battery cover sealed, it's non battery–changeable, you can open the cover and change the battery.
3. Please keep Transmitter dry when not in use, and avoid placement in television, screen or near the motor and other sources of electromagnetic interference so as not to reduce the battery life.
4. Clean your Transmitter with water or mild neutral detergent, and dry it with a soft towel. (Never use alcohol, any abrasive material or volatile agents)
5. Do not put the elastic belt in a wash machine, a washer-dryer or a drier.
6. Do not iron the elastic belt.

NOTE Keep the batteries away from children. If swallowed, contact a doctor immediately.

Q/A of the Heart Rate Monitor Wrist Watch

I don't know where I am in the menu......

Please follow the directions in the user manual and back to main screen, then re-work.

Why is there no heart rate reading or heart beat icon flashes irregularly......

1. Make sure that the both sides electrodes of the Transmitter are well moistened, and you wear it as instructed.
2. Check that you are not too close to the electromagnetic interference.
3. Check that the HRM is inside the transmission range (3 feet / 1 meter) from the Transmitter you wearing.

Why do the keys of series of M001A not react......

Press all keys at the same time to reset the HRM, and the screen goes into sleep mode after a little sounds "beep" until the main screen recovers to initial factory defaults by pressing B, and please reconfigure the settings of all modes. If there is no reaction, please check the battery.

How to renew a battery......

To ensure the lifespan of the product, when the low battery symbol indicates, we recommend that the battery should be changed by an authorized dealer. And all settings of the HRM need to be reconfigured after renewed the battery.

| NOTE | Please note that excessive use of the alarm tone and backlight drains the battery more rapidly. |

Q/A of the Transmitter

Why is there no heart beat signal......

1. Make sure that the electrodes are well moistened.
2. Check that the HRM is within 3 feet / 1 meter of the transmission range from the Transmitter you wearing.
3. Make sure that the battery can work.
4. Every time you place on the Transmitter, just keep it lying below your chest, simultaneously, avoid constantly moving or adjusting the Transmitter that may cause interruption for the signals readout. We suggest you starting to exercise when your heart rate is readout on the HRM display in a maximum of 15 seconds.

Why the heart beat icon flashes irregularly......

1. Make sure that the electrodes are well moistened.
2. Make sure there is no electromagnetic interference nearby, eg. televisions, mopeds, trolley buses, overhead lines of electric railways, traffic lights, high voltage power lines, electric security

gates, cellular phones, car motors, etc. Keep away from the upper objects to avoid any possible disturbance. Try to find out the source of electromagnetic radiation in close vicinity to your HRM, move right away or remove the Transmitter from your chest.

3. The Transmitter needs to match oneself body. Use the fastening mechanism of the elastic belt to adjust the length for a perfect fit, and also for a prevention of the signals being weaken.

4. We suggest female user wearing sport underwear while using the Transmitter.

5. Check that you are not surrounded with somebody wearing the Transmitter. The HRM has a quite ability to restrain disturbance, the readout values can be displayed correctly even if the heart beat icon flashes irregularly; nevertheless we suggest you be careful to avoid the external interference during your heart rate signal is receiving by the device (which displays "00") under the synchro-screen of the Exercise Mode.

> **NOTE** Please keep Transmitter dry when not in use, and avoid placement in television, screen or near the motor and other sources of electromagnetic interference so as not to reduce the battery life.

With the use of sports equipment

Several pieces of sports equipment with electronic or electrical components such as LED displays, motors, and electrical brakes may cause interfering stray signals. You can try to tackle these problems as the following suggestions:

1. First of all, remove the Transmitter from your chest and use the sports equipment as you would normally.

2. Move your HRM around until you find an area in which it displays "00" of the heart beat reading. (Interference is often worst right in front of the display panel of the equipment, while the left or right side of display is relatively free of disturbance.)

3. Put the Transmitter back on your chest and keep the HRM in the interference-free area as far as possible.

4. If your HRM still does not display the value correctly when using the sports equipment, this piece of equipment may be electrically too noisy for wireless heart rate measurement.

Water resistant
1. To maintain the water resistance, and to avoid under the moist environment.
2. Do not press any key of the HRM under water.
3. Pool water with a high chlorine content and seawater are very conductive that may have problems for users transmitting and measuring their heart rate. The electrodes of a Transmitter may short-circuit, which prevent ECG signals from being detected by the Transmitter. Therefore, we recommend not to use heart rate transmission under water.

Minimizing possible risks when exercising
1. Notice to persons with pacemakers, defibrillators, or other implanted electronic devices do not use the heart rate monitor wrist watch. Individuals who have any one of above devices use the HRM at their own risk.
2. If the answer is yes to any of the following questions, we recommend that you consult a doctor before starting an exercise program.
    2-1 Have you been physically inactive for the past 5 years ?
    2-2 Do you have high blood pressure or high blood cholesterol ?
    2-3 Are you taking any blood pressure or cardiac medication ?
    2-4 Do you have a history of breathing problems ?
    2-5 Are you recovering from a serious illness or surgery treatment ?
    2-6 Do you use a pacemaker or another implanted electronic device ?
    2-7 Do you smoke ?
    2-8 Are you pregnant ?

UPDATE 2012. 07. 18

European Union Directive 2002 / 96 / EC on Waste Electrical and Electronic Equipment (WEEE).

Batteries should be disposed of properly according to local regulations.