

User Manual

Product Name:

TX:

Stretch Fabric Transmitter

Model Number:

ZT18

FCC ID: QSWZT18

RX:

Product Name:

combi

Model Number:

ZW61 / ZW62 / ZW63

ZENTAN TECHNOLOGY CO., LTD.

Cardiosport Combi C1

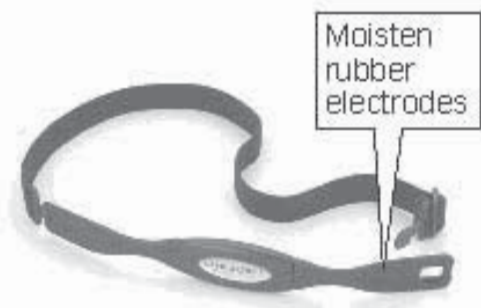
<i>Cardiosport Combi C1</i>	2
<i>Quick Start</i>	2
<i>Operating and setting Instructions</i>	3
<i>Setting the Time and Date</i>	3
<i>Setting the Daily Alarm</i>	4
<i>12/24 Hour Format</i>	5
<i>Using the Chronograph (stopwatch)</i>	5
<i>Setting the Ambient (pre-exercise) Heart Rate</i>	5
<i>Setting your weight and age</i>	6
<i>Setting your Training Zone Limits</i>	6
<i>Heart Zone audible alarm</i>	7
<i>Data SCAN (from any Mode)</i>	7
<i>About your Cardiosport System 122 Digital heart rate monitor</i>	8
<i>Digital Coding Interlock</i>	8
<i>Water Resistance</i>	8
<i>Battery Life</i>	8
<i>Factory Reset</i>	9
<i>Troubleshooting</i>	9
<i>Servicing</i>	10
<i>Heart Rate Monitor Training</i>	10
<i>Intensity of Exercise</i>	11
<i>The F.I.T.T Method (Frequency, Intensity, Time and Type of exercise)</i>	12

Cardiosport Combi C1 Users Instructions

Quick Start



Your heart rate monitor (HRM) consists of the Chest Transmitter and the Watch Receiver.



Follow these steps and you can be monitoring your exercise minutes.

Get Dressed ...

Place the transmitter around your chest and adjust the elastic strap. Moisten the two electrodes with water (or saliva) so there is a good contact between chest and transmitter.

Get Ready ...

Place the watch on your wrist, remove the small white plastic washer from under the crown wheel, adjust the hands to the correct time and click the crown wheel in towards the watch then press and hold the MODE button until the display changes to show a heart and then after a few seconds, the heart rate number and percentage of maximum heart rate value (the percentage of maximum heart rate value will not be correct until you have set your age – see later section).

GO!

Have fun, the monitor is there to help and protect you, whatever you are doing. Note the readings during exercise and try to keep within your personal limits. During use you can see a summary of how you are doing, afterwards you can check to see a summary of how you did. Just press the SCAN button once (bottom right)

and you will see the screen scroll through your maximum heart rate (MAX SCAN), average heart rate (AVG) and exercise time (EXT).

Operating and setting Instructions

Start from time of day with heart rate OFF (Main Screen) - This makes things easy to follow.

When you are setting the monitor for the first time it will be easiest if you follow the setting instructions in order and from start to finish. This way you will understand all of the features and how to reach them from any screen.



Switching heart rate ON and OFF

Press and hold the Mode button to turn heart rate ON. Press and hold the Mode button again to turn heart rate OFF.

Auto OFF

If there is no heart rate, for example if you remove the chest transmitter, after 2 minutes the

watch switches heart rate OFF automatically.

Screen Light ☼

Press the LIGHT button and the screen will be glow with a green light. The heart rate display will freeze for three seconds so you have time to view all the data.

Switching from one function to another

There are three main function screens, each press of the MODE button moves to the next main function screen in sequence;

1. Time of Day (main screen) - When heart rate is ON this shows heart rate next to the heart, percentage of Max and Time of day
2. Chronograph (or stopwatch) - When heart rate is ON this shows heart rate, percentage of Max and Chronograph
3. Calories - Shows the accumulated calories during exercise, to rest back to zero make a long pres of the Adjust button (also referred to as the Stop/Start button)

Setting the Time and Date

Make a long press of the SET

button until the second's starts to flash. Press either the STOP/START button or the SCAN button to zero the seconds (if the seconds number is below 30 they will zero down to the previous minute and if they are above thirty they will zero up to the next minute). Next make a short press of the SET button to move to the hours number, this will start flashing. Use the upper right watch button to increase the number (START/STOP) or use the lower right button to decrease the number (SCAN). Then press the SET button again and repeat this process for minutes and day. The next time you press SET you will see a "dd" icon appear in the left small circle. By pressing either of the two buttons on the right side of the watch you can move this icon to the right small circle. This is giving you the option of setting your date to appear on screen as either mm-dd (month followed by day) or dd-mm (day followed by month). Press SET again and you can set the date in the top right corner of the screen in the same manner as you set the time.

This watch gives you the option of setting the time in a second time zone for when you are travelling.

Press SET again and the screen will display T2 OFF. To turn time zone 2 ON press either of the buttons on the right side of the watch. Press SET again to set the time as before. When you are at the main screen display just press MODE to show the time in time zone 2.

Setting the Daily Alarm

From the T2 minutes screen display press the SET button and the alarm (ALM) screen will show. Press either of the buttons on the right side to add or remove the bell icon in the top right corner of the screen – this turns the alarm on or off. To set the alarm once the bell icon is showing press SET. (If you have Time Zone 2 (T2) on then you will now choose which time zone to set the alarm in by selecting either T1 or T2 in the left small circle via the right hand buttons. Press SET to continue.)

Set the alarm time hours and minutes using the right hand button to scroll up and down the numbers just as you set the clock time.

Press the MODE button at any time to return to the main screen

To reset the alarm from the main screen make a long press of SET followed by repeated presses of SET until the ALM screen is reached.

TIP: To save lots of button presses during the setting sequence, each LONG press of SET skips to the next section, after time it goes to Alarm setting.

From the MAIN SCREEN press the STOP/START button to check what time your alarm is set

12/24 Hour Format

To change the time display between the 12 and 24 hour time formats from the MAIN SCREEN, press and hold the START/STOP button, the daily alarm setting will show for 2 seconds then the format will show 12 or 24 then change to the other setting. Repeat this step to change back.

Using the Chronograph (stopwatch)

From the main screen press the MODE button until you see the chronograph (STW) screen.

The chronograph can be used

in either chronograph only or chronograph with heart rate mode, and is operated in the same way for both modes (remember to turn the heart rate mode on just do a long press of MODE from the main screen) -

- To start press and release the START/STOP button.
- To stop press and release the START/STOP button.
- To reset press and hold START/STOP button until display shows zero.

Setting the Ambient (pre-exercise) Heart Rate

You need to enter your pre-exercise (sometime called ambient or resting) heart rate and your weight so that the Calorie counter feature has your personal datum. From the main screen press the MODE button repeatedly until you see the calorie screen (CAL). Next do a long press of the SET button and you will see the ambient heart rate (AHR) screen which will display a flashing number. Use the upper right watch button to increase the number, use the lower right button to decrease the number.

Tip: Use your monitor to check your ambient heart rate, this is taken when sitting comfortably after relaxing for a minute or two prior to any exercise.

Setting your weight and age.

This data is important to calculate your calories burnt.

- *From the Ambient heart rate screen press SET to display the weight (WT) screen. Use the right hand buttons to increase or decrease the value. When setting your weight both Imperial (Lb) and Metric (Kg) values will be shown.*
- *Press SET again to display AGE and adjust this accordingly. If you have been tested and know your personal Maximum Heart Rate number, enter this instead of your AGE and this will be used to show your percentage of maximum heart rate.*

Setting your Training Zone Limits

C3 has two training zones –

- *Manual – You can set your own upper and lower training*

zone limits. From the main screen with heart rate OFF press MODE to reach the chronograph screen (STW) then do a long press of SET. Now you will see the heart rate screen (HR) where you will see a small heart icon with an upwards arrow and a flashing number. This is your upper heart rate limit which you can change via the right hand buttons. Next press SET to do the same with your lower heart rate limit. When you are exercising in this zone and exceed your upper heart rate limit an arrow will appear above the heart icon warning you to reduce your heart rate, likewise if your heart rate drops below your lower limit an arrow will appear under the heart letting you know that you should increase your heart rate.

- *CardioZone - The C3 CardioZone is set during exercise. Once you reach a comfortable rate of exercise, just press and hold the SET button to set and activate the CardioZone, which works like the cruise control of a*

car, keeping you within the selected workout level or speed. You will see a small CZ icon appear at the top of the screen. The zone is set 2.5% above and 7.5% below the percentage of Max HR when the button is pressed.

Tip: Try adjusting your exercise rate until your breathing matches the desired pace and you feel able to sustainable the rate for at least 5 minutes before you set the CardioZone.

Heart Zone audible alarm

The audible buzzer for the heart zone alarm (both manual zone and CardioZone) is switched ON and OFF by doing a long press of SET from the STW screen. You will see a small icon appear or disappear in the right hand corner.

Tip: The heart rate must be switched ON to turn the audible Target zone alarm ON and OFF.

Data SCAN (from any Mode)

Summary exercise data is

automatically recorded when you switch the heart rate ON. Press the SCAN button at any time (heart rate ON or OFF) and the display will scroll through a summary scan of your current exercise session showing;

- ⇒ Maximum heart rate – Peak level recorded
- ⇒ Average heart rate – Continuously updated average heart rate for session
- ⇒ Exercise Time

Each screen shows for around 3 seconds.

When heart rate is switched OFF, the session data is held in memory and can be recalled by pressing the SCAN button as often as you like. The last session data is stored in memory until the next session is started, by switching heart rate ON, then the memory is automatically cleared and a new session Data recording begins.

Tip: If necessary make a note of the summary data before you switch Heart Rate back ON and the session is reset.

Note : The calories begin

automatically recording when heart rate is switched on and stop when heart rate is switched off. Data is held in memory and added to when you next exercise so you can view the accumulative calories burnt over several exercise sessions. To reset the calories to Zero do a long press of START/STOP from the CAL screen.

About your Cardiosport System 122 Digital heart rate monitor

The Cardiosport digital telemetry technology utilises a safe 122kHz low frequency system designed to deliver reliable coded heart rate information, so all you have to concentrate on is getting the most from your exercise. Each time you put on your chest transmitter a code is randomly selected, the code combined with the precise transmission interval results in the unique interlocking pairing between the chest transmitter and watch.

Digital Coding Interlock

When you switch the heart rate ON, the watch listens out for a digital coded heart rate signal.

If this is found the two parts interlock with a unique code/ time interval. If the watch finds more than one coded signal (for example if you are in a group), then it can't be sure which one is you and the heart rate number will remain at Zero. All you need to do is move away (6 feet or 1.8 metres) from others until the locking takes place. Then you can move back into close proximity with others. If the interlock is lost for any reason, the watch will beep once to alert you and the heart rate display will go to Zero, in this case you should repeat the interlock process.

Water Resistance

Both the watch and transmitter are water resistant and can be used for swimming, taking a shower or water sports.

Tip: Avoid pressing any buttons when the watch is submerged in water.

Battery Life

The watch battery should last for 2 years if you use the heart rate monitoring mode for one hour per day. The battery life will reduce greatly if the watch light is used frequently. The watch hands (for

time) and Digital data display are powered by different batteries, therefore depending on use, one may become empty before the other. Battery changes should only be carried out by authorised Cardiosport distributors or a Jewellery shop that will provide a guarantee for the work they do.

Factory Reset

If there is a problem you can't solve, press all five buttons to clear all settings and return to the factory default values, then run through the setting procedure from the beginning.

Troubleshooting

What if the heart rate reading is erratic or totally absent?

Make sure the chest transmitter is sufficiently tight. The transmitter should be positioned and the elastic strap tightened so that the electrodes are flat against your skin. Adjust the transmitter side to side or slightly up or down until it is positioned correctly, and the electrodes make good contact with your skin. Make sure the transmitter electrodes

are sufficiently moist. Moisten the electrodes with water, saliva or electrode gel. Accumulated sweat or dirt on the electrodes may impair electrical contact, so make sure they are kept clean. Make sure you have switched heart rate on.

What if the heart rate reading becomes extremely high?

Electromagnetic signals from outside sources may cause abnormally high or erratic heart rate readings. Common sources of electromagnetic signals are high voltage power lines, electric motors and mobile phones. Your heart rate should return to normal once you move away from the source.

Looking after your Monitor

Thoroughly wipe and dry your monitor and transmitter after use. Store in a cool dry place. Do not expose to direct sunlight or temperatures above 122 degrees Fahrenheit (50°C) or below 14 degrees Fahrenheit (-10°C). The elastic chest strap can be washed on a 30°C cycle.

Servicing

Your heart rate monitor has a two-year manufacturers warranty against manufacturing defects, if you need servicing during the warranty period or afterwards you should contact your retailer or the service centre in your country. Visit www.cardiosport.com for the latest contact details for the service centre in your country of residence.

Note: This is a consumer device and could suffer from interference from external electrical sources. The readings are for reference only and no responsibility can be accepted for the consequences of any erroneous readings

Heart Rate Monitor Training

Home Use

This is a consumer device for sports training, fitness and wellness use. You should not rely on the readings for clinical, medical or surgical use.

Be Safe

Try to avoid injury by seeking professional advice before you

begin an exercise program, especially if you have not exercised recently, if you are unfit, if you have had recent medical procedures or if you have a known medical condition that affects physical activity. Stop if you feel pain and do not over exert yourself to reach a pre-set limit.

Further information

You can obtain further information, general training tips and advice from www.cardiosport.com along with the contact details for Customer Services in your country of residence.

Exercising at the right heart rate intensity, is key to meeting your fitness and performance goals. The first step is to find out your maximum heart rate (MHR). Using a formula based on age or taking a sport-specific exercise assessment does this. The best way is to have a supervised test, but if you do not have this opportunity a formula can give you an approximate value.

The formulas:
Sedentary individuals use 220 minus your age to calculate

your approximate maximum. If you exercise/train aerobically 3 or more times a week, use 205 minus half your age.

*Example for an unfit person aged 50
220-50 = Maximum Heart Rate
170 beats per minute (bpm)*

*Example for fit person aged 50
205-25 = Maximum Heart Rate
180 beats per minute (bpm)*

Intensity of Exercise

If you are a beginner with the goal of improving overall fitness, losing weight or reducing stress, start exercising in the healthy heart zone, which is 50-59 percent of your maximum heart rate. If you already exercise regularly and are aiming to lose body fat, exercise in the fat burning zone, which is 60-69 percent of your maximum heart rate. If your goal is to improve aerobic capacity or athletic performance, exercise in the aerobic zone, which is 70-79 percent of your maximum heart rate. Competitive athletes usually incorporate interval training sessions into their programme in the anaerobic threshold zone, which is usually between 80-89 percent of maximum heart rate.

This high intensity exercise helps train muscles to handle lactic acid. It is advisable to structure these sessions. However, train sensibly at the upper limits.

Exercising regularly at a heart rate intensity that is too high does not produce additional aerobic benefits and increases the possibility of an athletic injury. Example: Taking a 30 year old just starting on an exercise programme with the aim of getting fitter would start exercising at a gentle intensity of 50-59% of MHR (50% of 190=95 bpm, 59% of 190=112bpm). If they wanted to lose weight, then a slightly higher intensity of 60-69% MHR (114 to 131 bpm) would be required. If the same 30 year old is already fit and wants to improve aerobic capacity or athletic performance, a higher intensity of 70-79% MHR (133 to 150 bpm) is required. If interval training sessions is incorporated into the training programme, this should be done in the anaerobic threshold zone, which lies between 80-89% MHR (152 to 169 bpm).

AGE	Heart Zone setting table					
	Heat by Heart (Warm Up)	Weight loss (Low)	Aerobic (Fitness)	Aerobic (Sports)	Red Line (Max)	Max HR using 220-Age
	50 - 59%	60 - 69%	70 - 79%	80 - 89%	90 - 99%	
20	100-111	120-131	140-151	160-171	180-200	200
24	98-116	118-135	137-155	157-174	176-196	196
28	96-113	115-132	134-152	154-171	173-192	192
32	94-111	113-130	132-148	150-167	169-188	188
36	92-108	110-127	129-145	147-164	166-184	184
40	90-106	108-124	126-142	144-160	162-180	180
44	88-104	106-121	123-139	141-156	158-176	176
48	86-101	103-119	120-136	138-153	155-172	172
52	84-99	101-116	118-133	134-150	151-168	168
56	82-97	98-113	115-129	131-146	148-164	164
60	80-94	96-110	112-126	128-142	144-160	160
64	78-92	94-108	109-123	125-139	140-156	156

The F.I.T.T Method (Frequency, Intensity, Time and Type of exercise)

Frequency of Exercise

Exercise in the zone that you have set at least 3-5 times per week, with no more than 48 hours between sessions. Even on 'rest days' gentle exercise such as a leisurely walk can be beneficial.

Intensity of Exercise

Select a zone that is both within your capability and in which you can achieve consistency. Studies show that people who exercise at too high an intensity, especially in the initial stages of their programme, drop out sooner, have more injuries and tend to

develop a negative impression towards exercise in general. Start in lower zone then build up gradually.

Time exercising

Aim for 20-60 minutes of continuous exercise in your zone each session. If you are unable to do 20 minutes initially, gradually build up to this.

Type of exercise

Choose activities that use large muscle groups and which are continuous. Some good examples are walking, swimming, running, aerobic dance, stepper and ski machines, treadmills, cycling and exercise bikes. Feel free to include more than one activity - perhaps cycle one day, swim the next and do an aerobics class on the third.

Cardiosport Combi C2

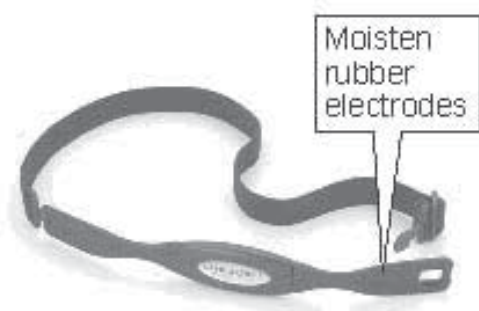
Cardiosport Combi C2	14
Quick Start	14
Operating and setting Instructions	15
Setting the Time and Date	15
Setting the Daily Alarm	16
12/24 Hour Format	17
Using the Chronograph (stopwatch)	17
Setting the Ambient (pre-exercise) Heart Rate	17
Setting your weight age and height	18
Setting your Training Zone Limits	18
Heart Zone audible alarm	19
Data SCAN (from any Mode)	19
Viewing additional Data (calories, weight, fat and BMI)	19
About your Cardiosport System 122 Digital heart rate monitor	20
Digital Coding Interlock	20
Water Resistance	20
Battery Life	20
Factory Reset	21
Troubleshooting	21
Servicing	21
Heart Rate Monitor Training	22
Intensity of Exercise	23
The F.I.T.T Method (Frequency, Intensity, Time and Type of exercise)	24

Cardiosport Combi C2 Users Instructions

Quick Start



Your heart rate monitor (HRM) consists of the Chest Transmitter and the Watch Receiver.



Follow these steps and you can be monitoring your exercise minutes.

Get Dressed ...

Place the transmitter around your chest and adjust the elastic strap. Moisten the two electrodes with water (or saliva) so there is a good contact between chest and transmitter.

Get Ready ...

Place the watch on your wrist, remove the small white plastic washer from under the crown wheel, adjust the hands to the correct time and click the crown wheel in towards the watch then press and hold the MODE button until the display changes to show a heart and then after a few seconds, the heart rate number and percentage of maximum heart rate value (the percentage of maximum heart rate value will not be correct until you have set your age – see later section).

GO!

Have fun, the monitor is there to help and protect you, whatever you are doing. Note the readings during exercise and try to keep within your personal limits. During use you can see a summary of how you are doing, afterwards you can check to see a summary of how you did. Just press the SCAN button once (bottom right)

and you will see the screen scroll through your maximum heart rate (MAX SCAN), average heart rate (AVG) and exercise time (EXT).

Operating and setting Instructions

Start from time of day with heart rate OFF (Main Screen) - This makes things easy to follow. When you are setting the monitor for the first time it will be easiest if you follow the setting instructions in order and from start to finish. This way you will understand all of the features and how to reach them from any screen.



Switching heart rate ON and OFF

Press and hold the Mode button to turn heart rate ON. Press and hold the Mode button again to turn heart rate OFF.

Auto OFF

If there is no heart rate, for example if you remove the chest transmitter, after 2 minutes the

watch switches heart rate OFF automatically.

Screen Light ☼

Press the LIGHT button and the screen will be glow with a green light. The heart rate display will freeze for three seconds so you have time to view all the data.

Switching from one function to another

There are three main function screens, each press of the MODE button moves to the next main function screen in sequence;

1. Time of Day (main screen) - When heart rate is ON this shows heart rate next to the heart, percentage of Max and Time of day
2. Chronograph (or stopwatch) - When heart rate is ON this shows heart rate, percentage of Max and Chronograph
3. Calories - Shows the accumulated calories during exercise, to rest back to zero make a long pres of the Adjust button (also referred to as the Stop/Start button)

Setting the Time and Date

Make a long press of the SET button until the seconds starts to flash. Press either the STOP/

START button or the *SCAN* button to zero the seconds (if the seconds number is below 30 they will zero down to the previous minute and if they are above thirty they will zero up to the next minute). Next make a short press of the *SET* button to move to the hours number, this will start flashing. Use the upper right watch button to increase the number (*START/STOP*) or use the lower right button to decrease the number (*SCAN*). Then press the *SET* button again and repeat this process for minutes and day. The next time you press *SET* you will see a "dd" icon appear in the left small circle. By pressing either of the two buttons on the right side of the watch you can move this icon to the right small circle. This is giving you the option of setting your date to appear on screen as either mm-dd (month followed by day) or dd-mm (day followed by month). Press *SET* again and you can set the date in the top right corner of the screen in the same manner as you set the time.

This watch gives you the option of setting the time in a second time zone for when you are travelling. Press SET again and the screen will display T2 OFF. To turn time zone 2 ON press either of the

buttons on the right side of the watch. Press SET again to set the time as before. When you are at the main screen display just press MODE to show the time in time zone 2.

Setting the Daily Alarm

From the T2 minutes screen display press the SET button and the alarm (ALM) screen will show. Press either of the buttons on the right side to add or remove the bell icon in the top right corner of the screen – this turns the alarm on or off. To set the alarm once the bell icon is showing press SET. (If you have Time Zone 2 (T2) on then you will now choose which time zone to set the alarm in by selecting either T1 or T2 in the left small circle via the right hand buttons. Press SET to continue.)

Set the alarm time hours and minutes using the right hand button to scroll up and down the numbers just as you set the clock time.

Press the MODE button at any time to return to the main screen

To reset the alarm from the main screen make a long press of SET followed by repeated presses

of SET until the ALM screen is reached.

TIP: To save lots of button presses during the setting sequence, each LONG press of SET skips to the next section, after time it goes to Alarm setting.

From the MAIN SCREEN press the STOP/START button to check what time your alarm is set

12/24 Hour Format

To change the time display between the 12 and 24 hour time formats from the MAIN SCREEN, press and hold the START/STOP button, the daily alarm setting will show for 2 seconds then the format will show 12 or 24 then change to the other setting. Repeat this step to change back.

Using the Chronograph (stopwatch)

From the main screen press the MODE button until you see the chronograph (STW) screen.

The chronograph can be used in either chronograph only or chronograph with heart rate mode, and is operated in the same way for both modes (remember to turn the heart rate mode on just do a long press of

MODE from the main screen) -

- To start press and release the START/STOP button.
- To stop press and release the START/STOP button.
- To reset press and hold START/STOP button until display shows zero.

Setting the Ambient (pre-exercise) Heart Rate

You need to enter your pre-exercise (sometime called ambient or resting) heart rate and your weight so that the Calorie counter feature has your personal datum. From the main screen press the MODE button repeatedly until you see the calorie screen (CAL). Next do a long press of the SET button and you will see the ambient heart rate (AHR) screen which will display a flashing number. Use the upper right watch button to increase the number, use the lower right button to decrease the number.

Tip: Use your monitor to check your ambient heart rate, this is taken when sitting comfortably after relaxing for a minute or two prior to any exercise.

Setting your weight, age and height.

This data is important to calculate your calories burnt and your BMI.

- From the Ambient heart rate screen press SET to display the weight (WT) screen. Use the right hand buttons to increase or decrease the value. When setting your weight both Imperial (Lb) and Metric (Kg) values will be shown.
- Press SET again to display AGE and adjust this accordingly. If you have been tested and know your personal Maximum Heart Rate number, enter this instead of your AGE and this will be used to show your percentage of maximum heart rate.
- Press SET once more to show height (HGT) and adjust this in the same way.

Setting your Training Zone Limits

C3 has two training zones –

- *Manual – You can set your own upper and lower training zone limits. From the main screen with heart rate OFF press MODE to reach the chronograph screen (STW) then do a long press of SET. Now you will see the heart*

rate screen (HR) where you will see a small heart icon with an upwards arrow and a flashing number. This is your upper heart rate limit which you can change via the right hand buttons. Next press SET to do the same with your lower heart rate limit. When you are exercising in this zone and exceed your upper heart rate limit an arrow will appear above the heart icon warning you to reduce your heart rate, likewise if your heart rate drops below your lower limit an arrow will appear under the heart letting you know that you should increase your heart rate.

- *CardioZone - The C3 CardioZone is set during exercise. Once you reach a comfortable rate of exercise, just press and hold the SET button to set and activate the CardioZone, which works like the cruise control of a car, keeping you within the selected workout level or speed. You will see a small CZ icon appear at the top of the screen. The zone is set 2.5% above and 7.5% below the percentage of Max HR when the button is pressed.*

Tip: Try adjusting your exercise rate until your breathing matches the desired pace and you feel able to sustainable the rate for at least 5 minutes before you set the CardioZone.

Heart Zone audible alarm

The audible buzzer for the heart zone alarm (both manual zone and CardioZone) is switched ON and OFF by doing a long press of SET from the STW screen. You will see a small icon appear or disappear in the right hand corner.

Tip: The heart rate must be switched ON to turn the audible Target zone alarm ON and OFF.

Data SCAN (from any Mode)

Summary exercise data is automatically recorded when you switch the heart rate ON. Press the SCAN button at any time (heart rate ON or OFF) and the display will scroll through a summary scan of your current exercise session showing;

- ⇒ Maximum heart rate – Peak level recorded
- ⇒ Average heart rate –

Continuously updated average heart rate for session

⇒ Exercise Time

Each screen shows for around 3 seconds.

When heart rate is switched OFF, the session data is held in memory and can be recalled by pressing the SCAN button as often as you like. The last session data is stored in memory until the next session is started, by switching heart rate ON, then the memory is automatically cleared and a new session Data recording begins.

Tip: If necessary make a note of the summary data before you switch Heart Rate back ON and the session is reset.

Viewing additional Data (calories, weight, fat and BMI)

From the timer (TMR) screen (with Heart Rate ON or OFF) press MODE to view calories (CAL). From here do a long press of SCAN and the display will scroll through a summary scan of Weight (Wt), FAT and BMI.

Note : The calories begin automatically recording when

heart rate is switched on and stop when heart rate is switched off. However unlike other data it is held in memory and added to when you next exercise so you can view the accumulative calories burnt over several exercise sessions. To reset the calories to Zero do a long press of START/STOP from the CAL screen.

About your Cardiosport System 122 Digital heart rate monitor

The Cardiosport digital telemetry technology utilises a safe 122kHz low frequency system designed to deliver reliable coded heart rate information, so all you have to concentrate on is getting the most from your exercise. Each time you put on your chest transmitter a code is randomly selected, the code combined with the precise transmission interval results in the unique interlocking pairing between the chest transmitter and watch.

Digital Coding Interlock

When you switch the heart rate ON, the watch listens out for a digital coded heart rate signal. If this is found the two parts interlock with a unique code/ time interval. If the watch finds

more than one coded signal (for example if you are in a group), then it can't be sure which one is you and the heart rate number will remain at Zero. All you need to do is move away (6 feet or 1.8 metres) from others until the locking takes place. Then you can move back into close proximity with others. If the interlock is lost for any reason, the watch will beep once to alert you and the heart rate display will go to Zero, in this case you should repeat the interlock process.

Water Resistance

Both the watch and transmitter are water resistant and can be used for swimming, taking a shower or water sports.

Tip: Avoid pressing any buttons when the watch is submerged in water.

Battery Life

The watch battery should last for 2 years if you use the heart rate monitoring mode for one hour per day. The battery life will reduce greatly if the watch light is used frequently. The watch hands (for time) and Digital data display are powered by different batteries, therefore depending on use, one may become empty before the

other. Battery changes should only be carried out by authorised Cardiosport distributors or a Jewellery shop that will provide a guarantee for the work they do.

Factory Reset

If there is a problem you can't solve, press all five buttons to clear all settings and return to the factory default values, then run through the setting procedure from the beginning.

Troubleshooting

What if the heart rate reading is erratic or totally absent?

Make sure the chest transmitter is sufficiently tight. The transmitter should be positioned and the elastic strap tightened so that the electrodes are flat against your skin. Adjust the transmitter side to side or slightly up or down until it is positioned correctly, and the electrodes make good contact with your skin. Make sure the transmitter electrodes are sufficiently moist. Moisten the electrodes with water, saliva or electrode gel. Accumulated sweat or dirt on the electrodes may impair electrical contact, so make sure they are kept clean. Make sure you have switched

heart rate on.

What if the heart rate reading becomes extremely high?

Electromagnetic signals from outside sources may cause abnormally high or erratic heart rate readings. Common sources of electromagnetic signals are high voltage power lines, electric motors and mobile phones. Your heart rate should return to normal once you move away from the source.

Looking after your Monitor

Thoroughly wipe and dry your monitor and transmitter after use. Store in a cool dry place. Do not expose to direct sunlight or temperatures above 122 degrees Fahrenheit (50°C) or below 14 degrees Fahrenheit (-10°C). The elastic chest strap can be washed on a 30°C cycle.

Servicing

Your heart rate monitor has a two-year manufacturers warranty against manufacturing defects, if you need servicing during the warranty period or afterwards you should contact your retailer or the service centre in your country. Visit www.cardiosport.com for

the latest contact details for the service centre in your country of residence.

Note: This is a consumer device and could suffer from interference from external electrical sources. The readings are for reference only and no responsibility can be accepted for the consequences of any erroneous readings

Heart Rate Monitor Training

Home Use

This is a consumer device for sports training, fitness and wellness use. You should not rely on the readings for clinical, medical or surgical use.

Be Safe

Try to avoid injury by seeking professional advice before you begin an exercise program, especially if you have not exercised recently, if you are unfit, if you have had recent medical procedures or if you have a known medical condition that affects physical activity. Stop if you feel pain and do not over exert yourself to reach a pre-set limit.

Further information

You can obtain further information, general training tips and advice from **HYPERLINK** "<http://www.cardiosport.com>" www.cardiosport.com along with the contact details for Customer Services in your country of residence.

Exercising at the right heart rate intensity, is key to meeting your fitness and performance goals. The first step is to find out your maximum heart rate (MHR). Using a formula based on age or taking a sport-specific exercise assessment does this. The best way is to have a supervised test, but if you do not have this opportunity a formula can give you an approximate value.

The formulas:

Sedentary individuals use 220 minus your age to calculate your approximate maximum. If you exercise/train aerobically 3 or more times a week, use 205 minus half your age.

Example for an unfit person aged 50
 $220 - 50 = \text{Maximum Heart Rate}$
170 beats per minute (bpm)

Example for fit person aged 50

205-25 = Maximum Heart Rate
180 beats per minute (bpm)

Intensity of Exercise

If you are a beginner with the goal of improving overall fitness, losing weight or reducing stress, start exercising in the healthy heart zone, which is 50-59 percent of your maximum heart rate. If you already exercise regularly and are aiming to lose body fat, exercise in the fat burning zone, which is 60-69 percent of your maximum heart rate. If your goal is to improve aerobic capacity or athletic performance, exercise in the aerobic zone, which is 70-79 percent of your maximum heart rate. Competitive athletes usually incorporate interval training sessions into their programme in the anaerobic threshold zone, which is usually between 80-89 percent of maximum heart rate. This high intensity exercise helps train muscles to handle lactic acid. It is advisable to structure these sessions. However, train sensibly at the upper limits.

Exercising regularly at a heart rate intensity that is too high does not produce additional aerobic benefits and increases the possibility of an athletic injury. Example: Taking a 30 year

old just starting on an exercise programme with the aim of getting fitter would start exercising at a gentle intensity of 50-59% of MHR (50% of 190=95 bpm, 59% of 190=112bpm). If they wanted to lose weight, then a slightly higher intensity of 60-69% MHR (114 to 131 bpm) would be required. If the same 30 year old is already fit and wants to improve aerobic capacity or athletic performance, a higher intensity of 70-79% MHR (133 to 150 bpm) is required. If interval training sessions is incorporated into the training programme, this should be done in the anaerobic threshold zone, which lies between 80-89% MHR (152 to 169 bpm).

Heart Zone setting table						
AGE	Healthy Heart (Normal)	Weight loss (Low)	Aerobic (Fitness)	Anaerobic (Gym)	Red Line (Racing)	Max HR using 220-Age
	50 - 59%	60 - 69%	70 - 79%	80 - 89%	90 - 99%	
20	100-118	120-138	140-158	160-178	180-200	200
24	98-116	118-135	137-155	157-174	176-196	196
28	96-113	115-132	134-152	154-171	173-192	192
32	94-111	113-130	132-148	150-167	169-188	188
36	92-108	110-127	129-145	147-164	166-184	184
40	90-106	108-124	126-142	144-160	162-180	180
44	88-104	106-121	123-139	141-156	158-176	176
48	86-101	103-119	120-136	138-153	155-172	172
52	84-99	101-116	118-133	134-150	151-168	168
56	82-97	98-113	115-129	131-146	148-164	164
60	80-94	96-110	112-126	128-142	144-160	160
64	78-92	94-108	109-123	125-139	140-156	156

The F.I.T.T Method (Frequency, Intensity, Time and Type of exercise)

Frequency of Exercise

Exercise in the zone that you have set at least 3-5 times per week, with no more than 48 hours between sessions. Even on 'rest days' gentle exercise such as a leisurely walk can be beneficial.

Intensity of Exercise

Select a zone that is both within your capability and in which you can achieve consistency. Studies show that people who exercise at too high an intensity, especially in the initial stages of their programme, drop out sooner, have more injuries and tend to develop a negative impression towards exercise in general. Start in lower zone then build up gradually.

Time exercising

Aim for 20-60 minutes of continuous exercise in your zone each session. If you are unable to do 20 minutes initially, gradually build up to this.

Type of exercise

Choose activities that use

large muscle groups and which are continuous. Some good examples are walking, swimming, running, aerobic dance, stepper and ski machines, treadmills, cycling and exercise bikes. Feel free to include more than one activity - perhaps cycle one day, swim the next and do an aerobics class on the third.

Cardiosport Combi C3

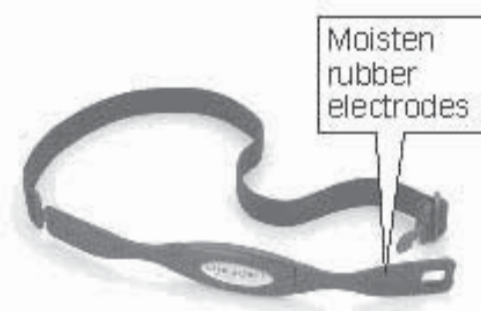
<i>Cardiosport Combi C3</i>	26
<i>Quick Start</i>	26
<i>Operating and setting Instructions</i>	27
<i>Setting the Time and Date</i>	27
<i>Setting the Daily Alarm</i>	28
<i>12/24 Hour Format</i>	29
<i>Using the Chronograph (stopwatch)</i>	29
<i>Setting the Ambient (pre-exercise) Heart Rate</i>	29
<i>Setting your weight and age</i>	30
<i>Setting your Training Zone Limits</i>	30
<i>Heart Zone audible alarm</i>	31
<i>Setting heart rate recovery (HRR)</i>	31
<i>Timer setting</i>	31
<i>Data SCAN (from any Mode)</i>	32
<i>Viewing additional Data (calories, weight, fat and BMI)</i>	33
<i>About your Cardiosport System 122 Digital heart rate monitor</i>	33
<i>Digital Coding Interlock</i>	33
<i>Water Resistance</i>	33
<i>Battery Life</i>	34
<i>Factory Reset</i>	34
<i>Troubleshooting</i>	34
<i>Servicing</i>	35
<i>Heart Rate Monitor Training</i>	35
<i>Intensity of Exercise</i>	36
<i>The F.I.T.T Method (Frequency, Intensity, Time and Type of exercise)</i>	37

Cardiosport Combi C3 Users Instructions

Quick Start



Your heart rate monitor (HRM) consists of the Chest Transmitter and the Watch Receiver.



Follow these steps and you can be monitoring your exercise minutes.

Get Dressed...

Place the transmitter around your chest and adjust the elastic strap. Moisten the two electrodes with water (or saliva) so there is a good contact between chest and transmitter.

Get Ready...

Place the watch on your wrist, remove the small white plastic washer from under the crown wheel, adjust the hands to the correct time and click the crown wheel in towards the watch then press and hold the MODE button until the display changes to show a heart and then after a few seconds, the heart rate number and percentage of maximum heart rate value (the percentage of maximum heart rate value will not be correct until you have set your age – see later section).

GO!

Have fun, the monitor is there to help and protect you, whatever you are doing. Note the readings during exercise and try to keep within your personal limits. During use you can see a summary of how you are doing, afterwards you can check to see a summary of how you did. Just press the SCAN button once (bottom right)

and you will see the screen scroll through your maximum heart rate (MAX SCAN), average heart rate (AVG) and exercise time (EXT).

Operating and setting Instructions

Start from time of day with heart rate OFF (Main Screen) - This makes things easy to follow. When you are setting the monitor for the first time it will be easiest if you follow the setting instructions in order and from start to finish. This way you will understand all of the features and how to reach them from any screen.



Switching heart rate ON and OFF

Press and hold the Mode button to turn heart rate ON. Press and hold the Mode button again to turn heart rate OFF.

Auto OFF

If there is no heart rate, for example if you remove the chest transmitter, after 2 minutes the watch switches heart rate OFF

automatically.

Screen Light ☀

Press the LIGHT button and the screen will be glow with a green light. The heart rate display will freeze for three seconds so you have time to view all the data.

Switching from one function to another

There are three main function screens, each press of the MODE button moves to the next main function screen in sequence;

1. Time of Day (main screen) - When heart rate is ON this shows heart rate next to the heart, percentage of Max and Time of day
2. Chronograph (or stopwatch) - When heart rate is ON this shows heart rate, percentage of Max and Chronograph
3. Calories - Shows the accumulated calories during exercise, to rest back to zero make a long pres of the Adjust button (also referred to as the Stop/Start button)

Setting the Time and Date

Make a long press of the SET button until the seconds starts to flash. Press either the STOP/START button or the SCAN

button to zero the seconds (if the seconds number is below 30 they will zero down to the previous minute and if they are above thirty they will zero up to the next minute). Next make a short press of the SET button to move to the hours number, this will start flashing. Use the upper right watch button to increase the number (START/STOP) or use the lower right button to decrease the number (SCAN). Then press the SET button again and repeat this process for minutes and day. The next time you press SET you will see a "dd" icon appear in the left small circle. By pressing either of the two buttons on the right side of the watch you can move this icon to the right small circle. This is giving you the option of setting your date to appear on screen as either mm-dd (month followed by day) or dd-mm (day followed by month). Press SET again and you can set the date in the top right corner of the screen in the same manner as you set the time.

This watch gives you the option of setting the time in a second time zone for when you are travelling. Press SET again and the screen will display T2 OFF. To turn time zone 2 ON press either of the buttons on the right side of the

watch. Press SET again to set the time as before. When you are at the main screen display just press MODE to show the time in time zone 2.

Setting the Daily Alarm

From the T2 minutes screen display press the SET button and the alarm (ALM) screen will show. Press either of the buttons on the right side to add or remove the bell icon in the top right corner of the screen – this turns the alarm on or off. To set the alarm once the bell icon is showing press SET. (If you have Time Zone 2 (T2) on then you will now choose which time zone to set the alarm in by selecting either T1 or T2 in the left small circle via the right hand buttons. Press SET to continue.)

Set the alarm time hours and minutes using the right hand button to scroll up and down the numbers just as you set the clock time.

Press the MODE button at any time to return to the main screen

To reset the alarm from the main screen make a long press of SET followed by repeated presses

of SET until the ALM screen is reached.

TIP: To save lots of button presses during the setting sequence, each LONG press of SET skips to the next section, after time it goes to Alarm setting.

From the MAIN SCREEN press the STOP/START button to check what time your alarm is set

12/24 Hour Format

To change the time display between the 12 and 24 hour time formats from the MAIN SCREEN, press and hold the START/STOP button, the daily alarm setting will show for 2 seconds then the format will show 12 or 24 then change to the other setting. Repeat this step to change back.

Using the Chronograph (stopwatch)

From the main screen press the MODE button until you see the chronograph (STW) screen.

The chronograph can be used in either chronograph only or chronograph with heart rate mode, and is operated in the same way for both modes (remember to turn the heart rate mode on just do a long press of

MODE from the main screen) -

- To start press and release the START/STOP button.
- To stop press and release the START/STOP button.
- To reset press and hold START/STOP button until display shows zero.

Setting the Ambient (pre-exercise) Heart Rate

You need to enter your pre-exercise (sometime called ambient or resting) heart rate and your weight so that the Calorie counter feature has your personal datum. From the main screen press the MODE button repeatedly until you see the calorie screen (CAL). Next do a long press of the SET button and you will see the ambient heart rate (AHR) screen which will display a flashing number. Use the upper right watch button to increase the number, use the lower right button to decrease the number.

Tip: Use your monitor to check your ambient heart rate, this is taken when sitting comfortably after relaxing for a minute or two prior to any exercise.

Setting your weight and age.

This data is important to calculate your calories burnt.

- From the Ambient heart rate screen press SET to display the weight (WT) screen. Use the right hand buttons to increase or decrease the value. When setting your weight both Imperial (Lb) and Metric (Kg) values will be shown.
- Press SET again to display AGE and adjust this accordingly. If you have been tested and know your personal Maximum Heart Rate number, enter this instead of your AGE and this will be used to show your percentage of maximum heart rate.
- Press SET once more to show height (HGT) and adjust this in the same way.

Setting your Training Zone Limits

C3 has two training zones –

- Manual – You can set your own upper and lower training zone limits. From the main screen with heart rate OFF press MODE to reach the chronograph screen (STW) then do a long press of SET. Now you will see the heart

rate screen (HR) where you will see a small heart icon with an upwards arrow and a flashing number. This is your upper heart rate limit which you can change via the right hand buttons. Next press SET to do the same with your lower heart rate limit. When you are exercising in this zone and exceed your upper heart rate limit an arrow will appear above the heart icon warning you to reduce your heart rate, likewise if your heart rate drops below your lower limit an arrow will appear under the heart letting you know that you should increase your heart rate.

- CardioZone - The C3 CardioZone is set during exercise. Once you reach a comfortable rate of exercise, just press and hold the SET button to set and activate the CardioZone, which works like the cruise control of a car, keeping you within the selected workout level or speed. You will see a small CZ icon appear at the top of the screen. The zone is set 2.5% above and 7.5% below the percentage of Max HR when the button is pressed.

Tip: Try adjusting your exercise rate until your breathing matches the desired pace and you feel able to sustainable the rate for at least 5 minutes before you set the CardioZone.

Heart Zone audible alarm

The audible buzzer for the heart zone alarm (both manual zone and CardioZone) is switched ON and OFF by doing a long press of SET from the STW screen. You will see a small icon appear or disappear in the right hand corner.

Tip: The heart rate must be switched ON to turn the audible Target zone alarm ON and OFF.

Setting heart rate recovery (HRR)

Heart rate recovery (HRR) automatically records the time it takes your heart to drop from a pre-set upper limit to a pre-set lower limit. Timing begins automatically when your heart rate passes through the upper limit, and continues until your heart rate drops below the lower limit. When timing stops, the heart rate recovery alarm gives three continuous beeps

whenever a heart rate recovery is completed. The alarm cannot be switched off but limits can be set to prevent any alarm.

To set the HRR limits from the main screen (heart rate OFF) press MODE to reach the stopwatch (STW) then give a long press of SET. You will see the manual zone setting screen so press SET twice more to reach the heart rate recovery setting screen (HRR) where you will see a flashing number and a heart icon with an upper arrow. Set the upper limit using the right hand buttons then press SET again and set the lower limit in the same way.

Tip: To view the HRR from the main screen (heart rate OFF) press MODE twice to reach the stopwatch (STW) then give a long press of SCAN. To prevent any alarm set limits above max HR and below lowest HR, e.g. 200 and 30

Timer setting

The Timer can be set for use in two options:

- Single countdown timer
- Countdown timer with auto-repeat

To set the timer from the main screen (HR OFF) press MODE until you reach the timer screen (TMR). Give a long press of the SET button and you will see a small circular arrow icon appear. By pressing either of the right hand buttons you can take the icon on or off. If the icon is on then the timer will be in auto-repeat mode and if the icon is off then the timer will be a single countdown.

Press SET again to set the hours using the right hand buttons, again to set the minutes and once more for the seconds.

The countdown timer can be used with or without heart rate activated.

When the time has counted down to zero on a single countdown, the alarm sounds for 10 seconds. When the time has counted down to zero on a repeat countdown, the alarm sounds for 1 beep if the time is under 1 minute, and for 10 seconds if over 1 minute.

From the Timer screen (TMR) -
To start countdown timer, press and release Start/Stop.
To stop countdown timer, press and release Start/Stop.

Data SCAN (from any Mode)

Summary exercise data is automatically recorded when you switch the heart rate ON. Press the SCAN button at any time (heart rate ON or OFF) and the display will scroll through a summary scan of your current exercise session showing;

- ⇒ Maximum heart rate – Peak level recorded
- ⇒ Average heart rate – Continuously updated average heart rate for session
- ⇒ Exercise Time

Each screen shows for around 3 seconds.

When heart rate is switched OFF, the session data is held in memory and can be recalled by pressing the SCAN button as often as you like. The last session data is stored in memory until the next session is started, by switching heart rate ON, then the memory is automatically cleared and a new session Data recording begins.

Tip: If necessary make a note of the summary data before you switch Heart Rate back ON and the session is reset.

Viewing additional Data (calories, weight, fat and BMI)

From the timer (TMR) screen (with Heart Rate ON or OFF) press MODE to view calories (CAL). From here do a long press of SCAN and the display will scroll through a summary scan of Weight (WT), FAT and BMI.

Note : The calories begin automatically recording when heart rate is switched on and stop when heart rate is switched off. However unlike other data it is held in memory and added to when you next exercise so you can view the accumulative calories burnt over several exercise sessions. To reset the calories to Zero do a long press of START/STOP from the CAL screen.

About your Cardiosport System 122 Digital heart rate monitor

The Cardiosport digital telemetry technology utilises a safe 122kHz low frequency system designed to deliver reliable coded heart rate information, so all you have to concentrate on is getting the most from your exercise. Each time you put on your chest transmitter

a code is randomly selected, the code combined with the precise transmission interval results in the unique interlocking pairing between the chest transmitter and watch.

Digital Coding Interlock

When you switch the heart rate ON, the watch listens out for a digital coded heart rate signal. If this is found the two parts interlock with a unique code/ time interval. If the watch finds more than one coded signal (for example if you are in a group), then it can't be sure which one is you and the heart rate number will remain at Zero. All you need to do is move away (6 feet or 1.8 metres) from others until the locking takes place. Then you can move back into close proximity with others. If the interlock is lost for any reason, the watch will beep once to alert you and the heart rate display will go to Zero, in this case you should repeat the interlock process.

Water Resistance

Both the watch and transmitter are water resistant and can be used for swimming, taking a shower or water sports.

Tip: Avoid pressing any buttons

when the watch is submerged in water.

Battery Life

The watch battery should last for 2 years if you use the heart rate monitoring mode for one hour per day. The battery life will reduce greatly if the watch light is used frequently. The watch hands (for time) and Digital data display are powered by different batteries, therefore depending on use, one may become empty before the other. Battery changes should only be carried out by authorised Cardiosport distributors or a Jewellery shop that will provide a guarantee for the work they do.

Factory Reset

If there is a problem you can't solve, press all five buttons to clear all settings and return to the factory default values, then run through the setting procedure from the beginning.

Troubleshooting

What if the heart rate reading is erratic or totally absent?

Make sure the chest transmitter is sufficiently tight. The transmitter should be positioned and the elastic strap tightened so that the

electrodes are flat against your skin. Adjust the transmitter side to side or slightly up or down until it is positioned correctly, and the electrodes make good contact with your skin. Make sure the transmitter electrodes are sufficiently moist. Moisten the electrodes with water, saliva or electrode gel. Accumulated sweat or dirt on the electrodes may impair electrical contact, so make sure they are kept clean. Make sure you have switched heart rate on.

What if the heart rate reading becomes extremely high?

Electromagnetic signals from outside sources may cause abnormally high or erratic heart rate readings. Common sources of electromagnetic signals are high voltage power lines, electric motors and mobile phones. Your heart rate should return to normal once you move away from the source.

Looking after your Monitor

Thoroughly wipe and dry your monitor and transmitter after use. Store in a cool dry place. Do not expose to direct sunlight or temperatures above 122 degrees

Fahrenheit (50°C) or below 14 degrees Fahrenheit (-10°C). The elastic chest strap can be washed on a 30°C cycle.

Servicing

Your heart rate monitor has a two-year manufacturers warranty against manufacturing defects, if you need servicing during the warranty period or afterwards you should contact your retailer or the service centre in your country. Visit www.cardiosport.com for the latest contact details for the service centre in your country of residence.

Note: This is a consumer device and could suffer from interference from external electrical sources. The readings are for reference only and no responsibility can be accepted for the consequences of any erroneous readings

Heart Rate Monitor Training

Home Use

This is a consumer device for sports training, fitness and wellness use. You should not rely on the readings for clinical, medical or surgical use.

Be Safe

Try to avoid injury by seeking professional advice before you begin an exercise program, especially if you have not exercised recently, if you are unfit, if you have had recent medical procedures or if you have a known medical condition that affects physical activity. Stop if you feel pain and do not over exert yourself to reach a pre-set limit.

Further information

You can obtain further information, general training tips and advice from **HYPERLINK** "<http://www.cardiosport.com>" www.cardiosport.com along with the contact details for Customer Services in your country of residence.

Exercising at the right heart rate intensity, is key to meeting your fitness and performance goals. The first step is to find out your maximum heart rate (MHR). Using a formula based on age or taking a sport-specific exercise assessment does this. The best way is to have a supervised test, but if you do not have this opportunity a formula can give you an approximate value.

*The formulas:
Sedentary individuals use 220 minus your age to calculate your approximate maximum. If you exercise/train aerobically 3 or more times a week, use 205 minus half your age.*

Example for an unfit person aged 50

*220-50 = Maximum Heart Rate
170 beats per minute (bpm)*

*Example for fit person aged 50
205-25 = Maximum Heart Rate
180 beats per minute (bpm)*

Intensity of Exercise

If you are a beginner with the goal of improving overall fitness, losing weight or reducing stress, start exercising in the healthy heart zone, which is 50-59 percent of your maximum heart rate. If you already exercise regularly and are aiming to lose body fat, exercise in the fat burning zone, which is 60-69 percent of your maximum heart rate. If your goal is to improve aerobic capacity or athletic performance, exercise in the aerobic zone, which is 70-79 percent of your maximum heart rate. Competitive athletes usually incorporate interval training sessions into their programme in the anaerobic threshold zone,

which is usually between 80-89 percent of maximum heart rate. This high intensity exercise helps train muscles to handle lactic acid. It is advisable to structure these sessions. However, train sensibly at the upper limits.

Exercising regularly at a heart rate intensity that is too high does not produce additional aerobic benefits and increases the possibility of an athletic injury. Example: Taking a 30 year old just starting on an exercise programme with the aim of getting fitter would start exercising at a gentle intensity of 50-59% of MHR (50% of 190=95 bpm, 59% of 190=112bpm). If they wanted to lose weight, then a slightly higher intensity of 60-69% MHR (114 to 131 bpm) would be required. If the same 30 year old is already fit and wants to improve aerobic capacity or athletic performance, a higher intensity of 70-79% MHR (133 to 150 bpm) is required. If interval training sessions is incorporated into the training programme, this should be done in the anaerobic threshold zone, which lies between 80-89% MHR (152 to 169 bpm).

AGE	Heart Zone setting table					Max HR using 220-Age
	Healthy Heart (Warm Up)	Weight loss (Low)	Aerobic (Fitness)	Aerobic (Sport)	Red Line (Max)	
	50 - 59%	60 - 69%	70 - 79%	80 - 89%	90 - 99%	
20	100-118	120-138	140-158	160-178	180-200	200
24	98-116	118-135	137-155	157-174	176-196	196
28	96-113	115-132	134-152	154-171	173-192	192
32	94-111	113-130	132-148	150-167	169-188	188
36	92-108	110-127	129-145	147-164	166-184	184
40	90-106	108-124	126-142	144-160	162-180	180
44	88-104	106-121	123-139	141-156	158-176	176
48	86-101	103-119	120-136	138-153	155-172	172
52	84-99	101-116	118-133	134-150	151-168	168
56	82-97	98-113	115-129	131-146	148-164	164
60	80-94	96-110	112-126	128-142	144-160	160
64	78-92	94-108	109-123	125-139	140-156	156

The F.I.T.T Method (Frequency, Intensity, Time and Type of exercise)

Frequency of Exercise

Exercise in the zone that you have set at least 3-5 times per week, with no more than 48 hours between sessions. Even on 'rest days' gentle exercise such as a leisurely walk can be beneficial.

Intensity of Exercise

Select a zone that is both within your capability and in which you can achieve consistency. Studies show that people who exercise at too high an intensity, especially in the initial stages of their programme, drop out sooner, have more injuries and tend to develop a negative impression

towards exercise in general. Start in lower zone then build up gradually.

Time exercising

Aim for 20-60 minutes of continuous exercise in your zone each session. If you are unable to do 20 minutes initially, gradually build up to this.

Type of exercise

Choose activities that use large muscle groups and which are continuous. Some good examples are walking, swimming, running, aerobic dance, stepper and ski machines, treadmills, cycling and exercise bikes. Feel free to include more than one activity - perhaps cycle one day, swim the next and do an aerobics class on the third.

FCC ID: QSWZT18

FCC Compliance and Advisory Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, according to Part 15 of the FCC rules (15.21). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

1. Reorient the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help. Any special accessories needed for compliance must be specified in the instruction manual.

Warning:

A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Note:

Section 15.21 Information to user.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the

manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.