

UNIQ™ C I C

PRO/TRAINER

Model 8733



***INSTRUCTION MANUAL
AND EXERCISE GUIDE***

C I C

COMPUTER INSTRUMENTS CORPORATION

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GENERAL INFORMATION

The Uniq Pro Trainer is a versatile fitness computer monitor specifically designed for sports training and personal use. The Uniq Pro Trainer senses the electrical signals generated by your heart in the same way physicians do when obtaining an electrocardiogram (ECG), and then electronically computes and digitally displays the heart rate in beats per minute on a wrist watch display. The Uniq Pro Trainer at the conclusion of the exercise period summarizes your workout and displays the amount of time your heart rate was above, below or in your preselected target zone.

EXERCISING FOR PHYSICAL FITNESS

Although many things contribute to a well-conditioned body, the key to it all is the circulation of blood and how readily the cardiovascular system is able to carry nutrients to the body cells. In a well-conditioned body, the lungs process air with little effort and the heart is easily able to deliver blood in large volume when required by vigorous bodily activity; in a poorly-conditioned body, a relatively low level of physical activity or sudden exertion may produce heart failure. A physically fit person is able to sustain vigorous activity without fatigue and generally feels better, sleeps better and is more energetic.

THE TARGET ZONE GUIDELINE FOR EXERCISE

The heart, like any other muscle in the body, can be strengthened by systematic physical exercise which creates the demand for bloodflow, causing the heart rate to increase. This activity must be sufficiently vigorous to condition the cardiovascular system but not so strenuous as to be harmful. The UNIQ Pro Trainer provides the precise control necessary for safely achieving optimum fitness. Medical authorities use the term "target zone" to describe the amount of activity which is enough to achieve fitness but not too much to exceed safe limits. This target zone is the level of activity, which produces a heart rate of from 70 to 85 percent of the maximum attainable heart rate during an all-out effort. In other words, your own heart rate can be used as a "speedometer" that tells you how much exercise your body needs for optimum physical fitness.

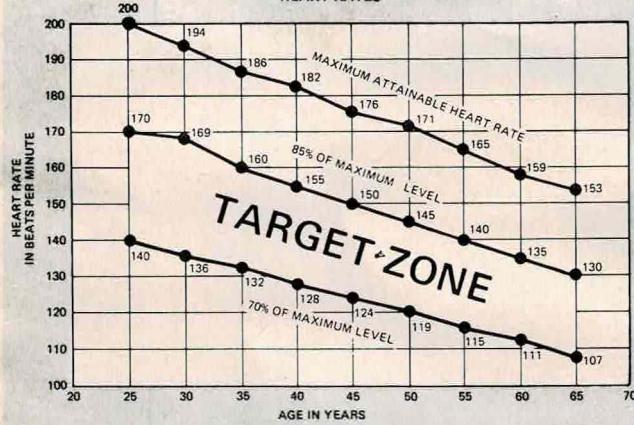
But before you can begin exercising in the target zone, you must know your own maximum attainable heart rate which, of course, is different for each individual. Therefore, BEFORE STARTING ON ANY EXERCISE PROGRAM YOU SHOULD CONSULT YOUR PHYSICIAN AND SUBMIT TO AN EXERCISE STRESS TEST. He will then be able to prescribe your own exercise target zone and exercise program.

Based on many studies, medical authorities have established the "average" maximum attainable heart rates shown in the chart (Figure 1).

This chart shows that as we grow older the highest heart rate which can be reached during an all-out exercise effort falls, as does the corresponding target zone heart rate. The average 25-year-old man has a maximum heart rate of 200. His target zone would then be 140 (70 %) to 170 (85 %) beats per minute heart rate; the average 65-year-old man with a maximum attainable heart rate of 153 beats per minute would have a target zone of 107 (70 %) to 130 (85 %) beats per minute.

Figure 1

AVERAGE MAXIMUM AND TARGET ZONE
HEART RATES



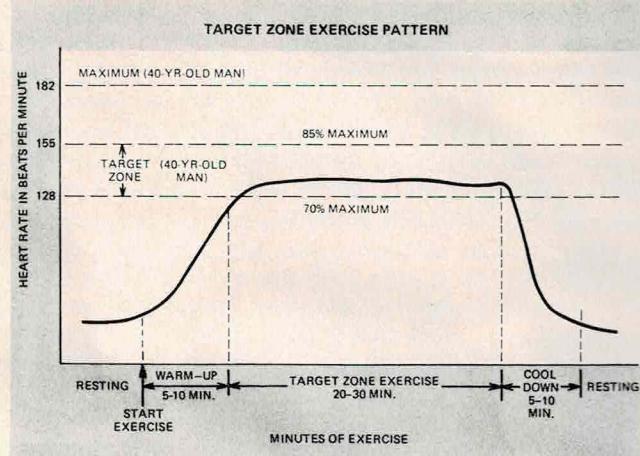
How To Use The Target Zone

The crucial part of your workout is the length of time you stay in the target zone, the length of time you exercise with sufficient vigor to keep your heart rate in the 70 % to 85 % range of maximum heart rate.

The typical exercise pattern should begin with a 5 to 10 minute warmup of moderate exercise in which

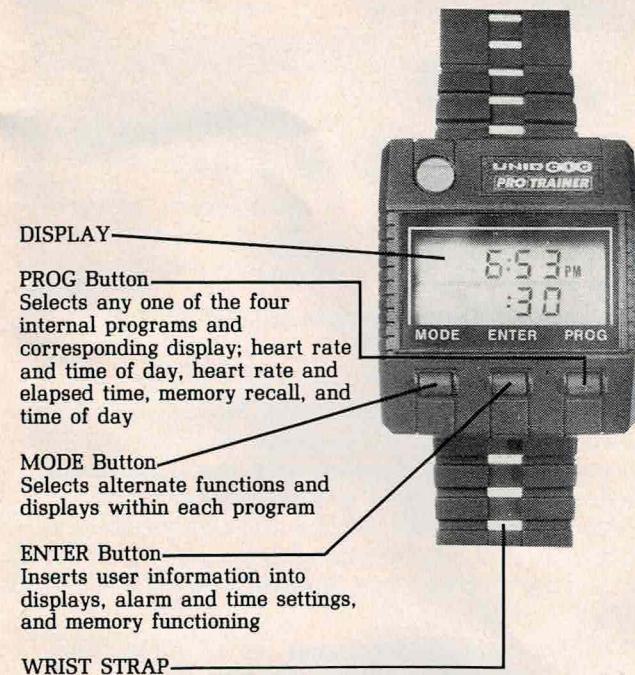
the heart rate gradually builds up, followed by more vigorous exercise to bring the heart rate up to the target zone and maintain it there for a period of from 20 to 30 minutes. The 70 % level is sufficient to promote fitness; the 85 % level is an upper limit which may be sustained if a more intense workout is desired. Exercise in the target zone should be followed by a 5 to 10 minute cool-down in which the exercise intensity is gradually reduced before it is stopped completely. The chart (Figure 2) shows the typical target zone exercise pattern for the average 40-year-old man.

Figure 2



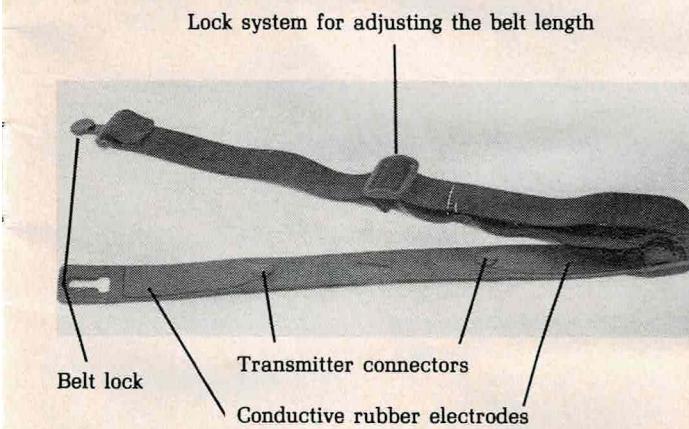
UNIQ PRO TRAINER COMPONENTS

RECEIVER



The RECEIVER battery will last approximately one year with average use.

ELECTRODE STRAP



TRANSMITTER



Casing for transmitter
electronics and battery
Chest Strap connectors

The TRANSMITTER is designed to be totally automatic with all its functions. The transmitter electronic circuits together with the replaceable battery are assembled in a plastic case. The transmitter does not require any special service. However, it is recommended to keep the transmitter in a dry and cool place to ensure maximum battery life.

The TRANSMITTER switches on automatically when in use, and off when not connected to the body. Detach the TRANSMITTER from the CHEST STRAP when not in use. The battery life is typically 1—2 years when the regular heart rate measurement use is 2—3 hours.

As the battery runs out, the TRANSMITTER'S range decreases indicating it is time to replace the battery. The TRANSMITTER and RECEIVER require lithium batteries, type BR2325. For battery replacement contact the local jeweler or watch repair center.

HOW TO PUT ON THE UNIQ PRO TRAINER

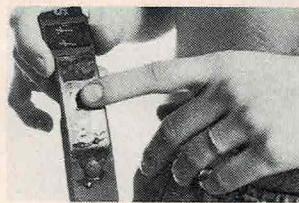
The TRANSMITTER makes a contact with your chest through the elastic electrode strap.

Electrode Strap and Transmitter

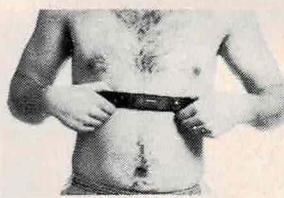
- Adjust strap length by using slide buckle so that a distance of about 6 inches separates the ends without stretching.



- Attach the TRANSMITTER to the belt snaps and moisten the electrode strips located on the inner side of the chest strap, located beneath the snaps, with water.



- Holding TRANSMITTER facing outward and with red button on your left, center the TRANSMITTER on the chest just below the breasts and stretch wrap belt around your back and buckle.



Wristwatch Receiver

- Attach the WRISTWATCH RECEIVER around your wrist.



HOW TO USE THE PRO TRAINER

1. Heart Rate and Time-of-Day Program

- Press and release the PROG button repeatedly until "AM" or "PM" appears at the top of the display with a small heart beneath it.

Fig. 3.

When the TRANSMITTER is being worn, a large heart will blink in the lower left corner of the display, indicating your heart rate.

Within 15 seconds, your heart rate in beats per minute, will be displayed below the time of day. Fig. 4.

When the TRANSMITTER is not being worn, no heart rate will be displayed and as a battery-saving feature, the display will revert to show time-of-day only, after 15 minutes.



Fig. 3



Fig. 4

If you wish to set the exact time of day, follow SETTING TIME OF DAY procedure on Page 12.

a) Setting HI/LO Alarm Limits (TARGET ZONE)

Follow above procedure to enter HEART RATE and TIME-OF-DAY PROGRAM then:

- Press and release MODE button once.
240 over 10 will appear indicating the highest and lowest alarm limits.



Fig. 5

Fig. 5. If other high/low alarm limits were previously set, these limits will appear.

- In order to set new values for the alarm limits, press and hold the ENTER button. The upper alarm limit will decrease from 240 in decrements of five. Release the ENTER button as soon as the desired value is displayed.

- Press and hold the ENTER button again to increase the lower alarm limit upward from 10 in increments of five. Release the ENTER button at the desired value.

The display now shows the selected HI/LO alarm limits. If a mistake is made, or if you would like to enter new alarm limits, repeat the procedure previously described. If you do not want to set the high/low alarms, return the limits to 240 over 10. The alarms will not beep at these values.

- Once the alarm limits have been set or observed, press and release the MODE button again to begin measuring your heart rate.

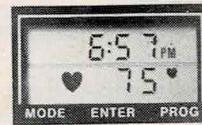


Fig. 6

b) Target Zone Measurement

Place unit in the **Time & Heart Rate** or **Stop Watch & Heart Rate Programs**. After heart rate reading appears in the lower half of display, **press the enter button** to start target zone recording. A time reading corresponding to seconds in the **Time & Heart Rate** program or tenths of seconds in the **Stop Watch & Heart Rate Program** will momentarily appear in the lower display followed by the display returning to showing heart rate. The colon in the upper display flashes in accordance with the heart rate to indicate that the unit is storing information. Note: Colon will not blink in upper display nor will the Uniq Pro Trainer store the target zone information if the **Enter** button is depressed prior to the lower display showing heart rate. Your exercise time below the target zone (below the low limit), in the target zone (between the low and high limits), and above the target zone (above the high limit) is cumulatively stored within memory. Target zone measurement is stopped, data is no longer entered into memory, by **depressing** the mode or program buttons.

Caution: Previous memory is automatically erased with the start of each new measuring period.

c) Memory Recall Program

To enter the Memory Recall Program, **press and release** the PROG button until the letter "TZ" appears on the lower right side of the display.

• Time Above Target Zone

With the word "HIGH" and the arrow pointing up displayed in the upper left corner of the display, the time shown in hours and minutes (upper display) and seconds (lower display) is the cumulative time that your heart rate was above the HI limit during the measurement cycle.



• Time in Target Zone

After viewing time above target zone as described above, momentarily **depress** the "ENTER" button. The left side of the display now shows the word "HIGH" and "LOW". The time shown in hours, minutes and seconds is the time your heart rate was in your programmed optimum exercise zone (between the low and high limits)



• Time Below Target Zone

After viewing time in target zone momentarily **depress** the "ENTER" button. The lower left side of the display now shows "LOW" with an arrow pointing down. The time shown, in hours, minutes and seconds, is the cumulative time that your heart rate was below the preprogrammed LOW limit.



- The above target zone times can be displayed again by momentarily **pressing** the "ENTER" button.

2. Heart Rate and Elapsed Time Program

- Press and release the PROG button until the display shows a small stopwatch with a small heart symbol below it and the numbers 0:00 to its left. Fig. 8.



When the TRANSMITTER is being worn, a large heart will blink in the lower left corner of the display. Within 15 seconds, your heart rate in beats per minute, will be displayed below the elapsed time.

When the TRANSMITTER is not being worn, no heart rate will be displayed and as a battery-saving feature, the display will revert to show time-of-day only, after 15 minutes.

a) Setting HI/LO Alarm Limits (Target Zone)

The heart rate alarm limits are set in the same manner as for the HEART RATE and TIME PROGRAM (see Section 1 a Page 8)

b) Memory Storage of Heart Rate and Elapsed Time

(see Section 1 b Page 9)

c) Memory Recall Program

(see Section 1 c Page 9)

3. SETTING TIME OF DAY

- Press and release the PROG button until the display shows hours, minutes, AM or PM in the top line and seconds in the lower line.

Fig. 11.



Fig 11

Setting Time of Day

- Press and release MODE button; TIME will appear on the left side of the display followed by the current time. To reset time, press and hold the ENTER BUTTON. The display will immediately go to 10:00 PM. As long as you hold the ENTER button the far left digit —1— will blink on and off while simultaneously "AM" and "PM" alternately appear. Release the ENTER button when the correct combination is displayed.
- Set the next digit by pressing and holding the ENTER button until the correct number appears; release ENTER button immediately. Repeat this procedure for the remaining two digits. Press and release the MODE button once, word TIME disappears from the display, time is shown with seconds advancing.

4. CARE AND MAINTENANCE

a) Battery Replacement

Both the Transmitter and the Receiver use lithium batteries.

With 2—3 hours daily use, the Transmitter battery will last 1 to 2 years and the Receiver battery will last approximately 1 year.

We recommend that you ask a local jeweler for assistance with battery replacement.

The Transmitter will turn on only when it is attached to the chest for pulse measurement.

To save battery life, the Receiver is programmed to automatically return to the TIME OF DAY PROGRAM after 15 minutes when no buttons have been pushed, nor pulses received.

b) Belt Washing Instructions

- Prior to hand washing the belt in warm water and mild soap, detach the TRANSMITTER by snapping off one end of the transmitter at a time. Pay special attention to the electrode surfaces making sure not to stretch or bend the electrode straps. Please do not use alcohol or scrub electrode surfaces because this could deteriorate the electrode surfaces.

PRECAUTIONS

- Do not immerse the TRANSMITTER or the RECEIVER in water, or expose same to moisture, rain, direct sunlight or very hot or cold temperatures.
- Erratic heart rate reception may occur if the UNIQ Pro Trainer is used in close proximity to strong electromagnetic radiation sources such as TV sets, electric motors, vehicles (including airplanes), radio and TV antennas and high voltage power lines.
- Only one TRANSMITTER should be used inside the range of any one RECEIVER as the RECEIVER may pick-up several signals simultaneously causing an incorrect readout. The minimum distance between two TRANSMITTERS should be three and one half feet.
- The RECEIVER is protected against water being splashed on it (such as in the rain) but not against immersion. If it gets wet put it in a dry, warm place (below 110 degrees Fahrenheit) for a few hours.

- If the device is used below 25 degrees Fahrenheit, keep the RECEIVER under your sleeve so that its temperature does not go below the specified minimum.
- The Electrode Belt may wear out with extensive use after several months causing disturbances during heart rate measurement. In this case, a new Belt should be purchased. To maximize Belt life: **do not** stretch or bend the Electrode Strips on the Belt. The Belt should be washed with a mild soap and rinsed with clear water.
- If the heart symbol does not flash on and off or is irregular with respect to your heart rate, moisten the Electrode surfaces on the Belt and/or tighten the Belt — be certain the TRANSMITTER is positioned correctly and is right side up (red button should be on your left).
- Do not use the Transmitter with a heart pacer nor on an aircraft to prevent possible electrical disturbances.

LIMITED ONE YEAR WARRANTY

Computer instruments warrants to the original consumer/purchaser that the product will be free from defects in material or workmanship for one year from date of purchase with the exception of batteries and electrode belt.

- Warranty does not cover damages due to misuse, abuse or accidents, negligence of the precautions; batteries, electrode belts; improper maintenance or commercial use; cracked or broken cases.
- Warranty is voided if repairs are made by persons not authorized by CIC.
- To assure proper registration of your UNIQ Pro Trainer, please mail warranty registration card within 10 days after purchase, using the enclosed warranty card.

- This warranty gives the purchaser specific legal rights, and the purchaser may also have other rights depending on State Law.
- The warranties contained herein are expressly in lieu of any other warranties, including implied warranty of merchantability and/or fitness for purpose.
- During this warranty period (one year) the product will be either repaired or replaced (at our option) without charge. For repair or replacement of your Uniq Pro Trainer, however, there is a \$ 7.50 U.S. charge for handling, return postage and insurance (this is not a repair charge.)

SERVICING

- To insure proper servicing of your Uniq Pro Trainer please fill out and mail the enclosed Warranty Registration Card within 10 days after purchase.
- Carefully pack the UNIQ Pro Trainer, TRANSMITTER, RECEIVER and ELECTRODE BELT in a shipping carton so it will not be damaged.
- Enclose original bill of purchase (or a photocopy).
- Please include a statement stating why the unit is being returned for repair.
- Mail postage prepaid to:
Computer Instruments Corp.
100 Madison Avenue
Hempstead, NY 11550
- Remember to include a check or money order for the \$ 7.50 handling and postage charge.

TARGET ZONE (TZ) FITNESS DIARY

TECHNICAL SPECIFICATIONS:

Pulse Transmitter

Case:	5½" x 1—1/5" x ½" (137 x 30 x 12 mm)	
Operating temperature:	23...113°F (-5... + 45°C)	
Power consumption:		
Active (transmit) state	Pulse rate 75 150	I _{max} /3V 130 μ A 210 μ A
	Passive (off) state	1 μ A
Battery:	160mAh lithium battery (BR2325)	

Receiver Microcomputer

Microcomputer:	CMOS 4 bit
Display:	7 digit LCD
Case:	2" x 1—5/8" x 5/8" (51 x 45 x 15 mm)
Operating temperature:	23...113°F (-5... + 45°C)
Power consumption:	min. 15 μ A max 80 μ A/3V
Battery:	160 mAh lithium battery (BR2325)
Patented:	US. PAT. NO. 4 625 733

Made in Finland by:

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Finland

for Computer Instruments Corp.

