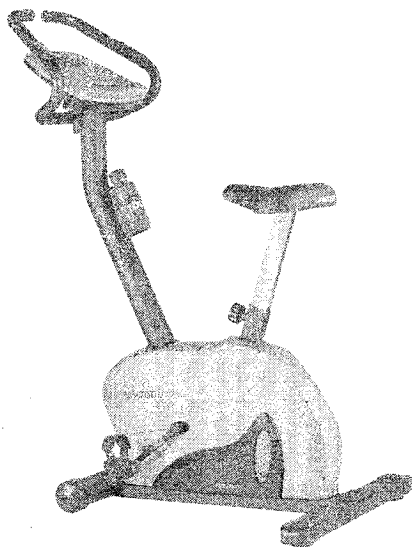


**PROTEUS<sup>®</sup>**  
FITNESS INNOVATION

# ERGOMETER MAGNETIC PROGRAMMABLE CYCLE



**PEC - 7000**  
Owner's manual

**IMPORTANT : PLEASE READ THROUGH INSTRUCTIONS CAREFULLY BEFORE STARTING THE ASSEMBLY. DO NOT PLUG TO POWER SUPPLY BEFORE MACHINE IS FULLY ASSEMBLED.**

- STEP 1.** FIT FRONT STABILIZER ( 2 ) TO THE FRAME ( 1 ) WITH CARRIAGE BOLTS ( 27 ) & WASHERS ( 29 ) & NUTS ( 33 ), NOTE TO PREVENT HEAD OF CARRIAGE BOLTS ( 27 ) FROM DAMAGING FLOOR, DIMPLED SQUARE HOLES ON STABILIZER ( 2 ) MUST BE FACING DOWN. ATTACH REAR STABILIZERS ( 3 ) TO REAR SIDE OF MAIN FRAME ( 1 ). FASTEN WITH CARRIAGE BOLTS ( 25 ) & WASHERS ( 29 ).

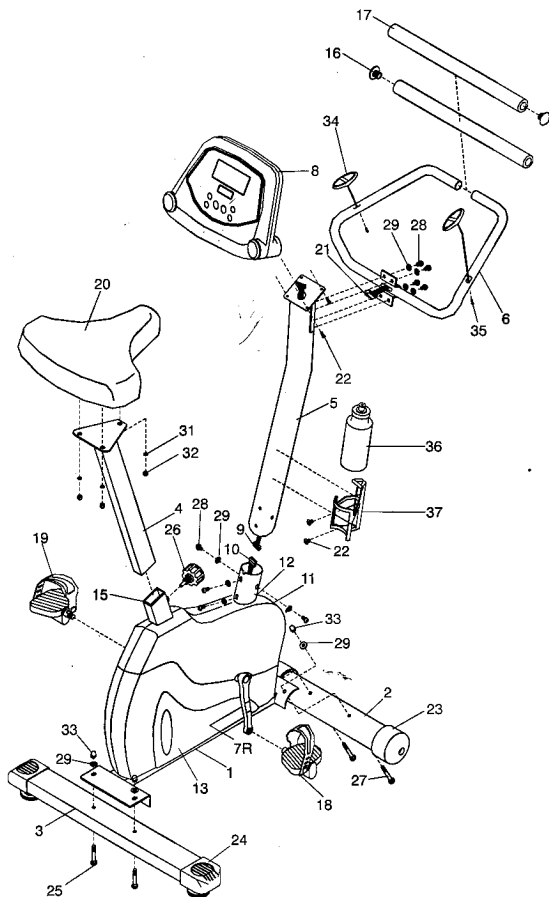
**IMPORTANT : READ ALL STEPS BEFORE ATTACHING PEDALS**

- STEP 2.**
- ATTACH PEDALS ( 18 / 19 ) TO PEDAL CRANKS. ( PEDALS MARKED "L" AND "R" INDICATES LEFT AND RIGHT SIDE OF BIKE. MAKE SURE NOT TO MIX IT UP ).
  - LEFT PEDAL HAS LEFT-HAND THREAD AND MUST BE TURNED COUNTERCLOCKWISE ( CCW ) TO ATTACH, RIGHT PEDAL HAS RIGHT-HAND THREAD, MUST BE TURNED CLOCKWISE ( CW ) TO ATTACH.
- STEP 3.** ATTACH SADDLE ( 20 ) TO SADDLE PLATE OF SEAT POST ( 04 ). FASTEN IT WITH SPRING WASHERS ( 31 ) AND NYLON NUTS ( 32 ). THEN ATTACH TO MAIN FRAME ( 01 ). ADJUST SADDLE TO DESIRED HEIGHT, TIGHTEN WITH POP PIN ( 26 ).
- STEP 4.** CONNECT MONITOR CABLE A ( 9, FROM END OF #5 HANDLEBAR POST ) AND MONITOR CABLE B ( 10, FROM MAIN FRAME ), THEN FIT HANDLEBAR POST ( 5 ) TO MAIN FRAME WITH BOLTS ( 28 ) AND WASHERS ( 29 ),
- STEP 5.** INSERT THE PULSE WIRE ( 21 ) INTO THE HANDLEBAR POST AND LET IT THROUGH THE TOP OF MONITOR MOUNTING PLATE. ASSEMBLE HANDLE BAR ( 06 ) ONTO HANDLE BAR POST ( 05 ), FIX WITH WASHERS ( 29 ) AND BOLTS ( 28 ),
- STEP 7.** CONNECT MONITOR CABLE A ( 9, TOP OF HANDLEBAR POST ) & PULSE WIRE ( 21 ) WITH MONITOR ( 08 ), THEN ATTACH MONITOR ( 08 ) TO THE MONITOR MOUNTING PLATE ( AT TOP OF HANDLEBAR POST ) WITH SCREWS ( 22 )..
- STEP 8.** ATTACH WATER BOTTLE RACK ( 37 ) TO HANDLEBAR POST WITH M5 SCREW( 22 ) THEN ATTACH WATER BOTTLE ( 36 ) INTO WATER BOTTLE RACK ( 37 ).

**" THE BATTERIES MUST BE REMOVED FROM THE APPLIANCE BEFORE IT IS SCRAPPED AND THAT THEY ARE DISPOSED OF SAFELY "**

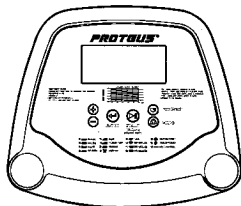
**NOW THE ASSEMBLY OF THE PROGRAMMABLE MAGNETIC CYCLE IS DONE.**


**NOTE : THE MACHINE IS REQUESTED TO USE AC ADAPTER, WHICH SHOULD BE WITH OUTPUT 6V/1000 MA, PLEASE ALSO REFER TO MONITOR INSTRUCTION FOR THE PROPER SPECIFICATION INFORMATION.**



PEC700020030102GB

KEY	QTY	DESCRIPTION
1.	1	MAIN FRAME
2.	1	FRONT STABILIZER
3.	1	REAR STABILIZER
4.	1	SEAT POST
5.	1	HANDLEBAR POST
6.	1	HANDLESAR
7R.	1	CRANK ( R )
7L.	1	CRANK ( L )
8.	1	CYCLEMONITOR
9.	1	MONITOR CABLE ( A )
10.	1	MONITOR CABLE ( B )
11.	1	CHAIN COVER ( R-1 )
12.	1	CHAIN COVER ( L-1 )
13.	1	CHAIN COVER ( R-2 )
14.	1	CHAIN COVER ( L-2 )
15.	1	30 * 60 SLEEVE
16.	2	HANDLEBAR END CAP
17.	2	FOAM GRIP
18.	1	PEDAL ( R )
19.	1	PEDAL ( L )
20.	1	SADDLE
21.	1	PULSES WIRE
22.	6	M5 SCREW
23.	2	WHEEL
24.	2	FOOT CAP
25.	2	M8 BOLT X 55mm
26.	1	KNOB W/ CLAMP
27.	2	M8 BOLT X 90mm
28.	8	M8 SOCKET BOLT X 20mm
29.	12	M8 WASHER
31.	3	M8 SPRING WASHER
32.	3	M8 NYLON NUT
33.	4	M8 DOME NUT
34.	1	GRIP PULSE
35.	2	M4 SCREW
36.	1	WATER BOTTLE
37.	1	WATER BOTTLE RACK



**START** **STOP** **PROGRAM** **8** **LEVEL** **8** 

TIME	WEIGHT	RPM	SPEED	DISTANCE	KJ/KG	WATT	TARGET H.R.	HEART RATE
00:00	888	888	88:88	88:88	888	888	888	888
WEIGHT	KM/H	MPH	TAT%	BW	SMI	AGE	BODYTYPE	

THE MONITOR IS DESIGNED FOR PROGRAMMABLE MAGNETIC BIKES AND INTRODUCED WITH THE FOLLOWING CATEGORIES :

- KEY FUNCTIONS
- ABOUT DISPLAYS
- OPERATING RANGES
- THINGS YOU SHOULD KNOW BEFORE EXERCISING
- OPERATION INSTRUCTIONS

## KEY FUNCTIONS

THERE ARE TOTAL 6 KEYS INCLUDING START / PAUSE, ENTER, MODE, UP, DOWN, AND RECOVERY

- A. START / PAUSE : STARTS OR STOPS THE PROGRAM CHOSEN. AND, RESETS THE MONITOR BY PRESSING AND HOLDING FOR 2 SECONDS.
- B. ENTER : CHOOSES THE FUNCTIONS FROM PROGRAMS, GENDER, HEIGHT, WEIGHT, TIME, DISTANCE, WATT, TARGET HEART RATE, AGE, AND 10 COLUMNS. THE CHOSEN FUNCTION SHALL FLASH. PLEASE NOTE THAT NOT ALL THE FUNCTIONS CAN BE SELECTED IN EVERY PROGRAM ACCORDING TO THE TYPES OF EACH PROGRAM.
- C. MODE : CHANGES THE DISPLAYS OF THE VALUES BETWEEN RPM OR SPEED, AND CAL OR WATT. THE VALUES OF RPM AND WATT SHOW AT THE SAME TIME, OR THE VALUES OF SPEED AND CAL DO BY PRESSING IT.
- D. UP (▲) : SELECTS OR INCREASES THE VALUES OF PROGRAMS, GENDER, HEIGHT, WEIGHT, TIME, DISTANCE, WATT, TARGET HEART RATE, AGE, AND 10 COLUMNS.
- E. DOWN (▼) : SELECTS OR DECREASES THE VALUES OF PROGRAMS, GENDER, HEIGHT, WEIGHT, TIME, DISTANCE, WATT, TARGET HEART RATE, AGE, AND 10 COLUMNS.
- F. RECOVERY : STARTS THE FUNCTION OF PULSE RECOVERY. WHEN PRESS AGAIN WILL OUT OF PULSE RECOVERY MODE.
- G. LCD CONTRAST CALIBRATION :
  - 1. DURING STOP MODE, PRESS & HOLD ENTER & ▲ ( + ) KEYS SIMULTANEOUSLY FOR EVER 2 SECONDS TO ENTER LCD CONTRAST CALIBRATION MODE.
  - 2. THEN YOU CAN PRESS ▲ ( + ) OR ▼ ( - ) KEY TO ADJUST THE LCD CONTRAST TO BE LIGHTER OR DARKER.
  - 3. AFTER COMPLETION LCD CONTRAST CALIBRATION. PRESS START/PAUSE KEY TO EXIT.
  - 4. THERE ARE 16 DIFFERENT LCD CONTRAST LEVEL AND THE DEFAULT VALUE IS IN 8<sup>TH</sup> LEVEL.

### ABOUT DISPLAY

A. START : INDICATES THE PROGRAM SELECTED HAS STARTED.

START

B. STOP : INDICATES THE PROGRAM SELECTED HAS PAUSED. AND, USERS ARE FREE TO CHANGE THE PROGRAMS AND THE VALUE OF FUNCTIONS APPLIED.

STOP

C. PROGRAMS : INDICATES THE PROGRAMS SELECTED FROM PROGRAM 1 TO PROGRAM 15.

PROGRAM :8

D. LEVELS : INDICATES THE LEVEL OF LOADING SELECTED FROM LEVEL 1 TO LEVEL 16.

LEVEL :8

E. GENDER : INDICATES THE GENDER ( MALE OR FEMALE ) SELECTED.



F. TIME / HEIGHT / WEIGHT DISPLAY : INDICATES ONLY 1 VALUE OF TIME, HEIGHT, OR WEIGHT DISPLAYED DEPENDING ON THE PROGRAMS.



G. RPM / SPEED / KM / H ( MPH ) DISPLAY : INDICATES ONLY 1 VALUE OF RPM, SPEED, OR KM / H ( MPH ) DISPLAYED DEPENDING ON THE PROGRAMS. KM / H OR MPH WILL DISPLAY WHEN CURRENT SHOWS UP.



H. DISTANCE / FAT% DISPLAY : INDICATES ONLY 1 VALUE OF DISTANCE OR FAT% DISPLAYED DEPENDING ON THE PROGRAMS.



I. CAL / WATT / BMR DISPLAY : INDICATES ONLY ONE VALUE OF CAL, WATT, OR BMR DISPLAYED DEPENDING ON THE PROGRAMS.



J. TARGET H.R. / BMI/AGE DISPLAY : INDICATES ONLY ONE VALUE OF TARGET HEART RATE, BMI, OR AGE DISPLAYED DEPENDING ON THE PROGRAMS.



K. HEART RATE / BODY TYPE DISPLAY : INDICATES ONLY ONE VALUE OF HEART RATE OR BODY TYPE DISPLAYED DEPENDING ON THE PROGRAMS.



- L. **LOADING PROFILES** : THERE ARE 10 COLUMNS OF LOADING BARS, AND 8 BARS IN EACH COLUMN. EACH COLUMN REPRESENTS 3 MINUTES WORKOUT ( WITHOUT THE CHANGE OF TIME VALUE ), AND EACH BAR REPRESENTS 2 LEVELS OF LOADING.

M. **BACKLIGHT FUNCTION**

PRESS THE START BUTTON AND THE BACKLIGHT WILL TURN ON.

PRESS THE STOP BUTTON AND THE BACKLIGHT WILL TURN OFF.

**OPERATING RANGES**

VALUES	RANGE ( COUNT UP )	COUNTDOWN	PRESET	INCREMENT ( DECREMENT )
PROGRAM	1~15	15~1	1	1
LEVEL	1~16	16~1	N/A	1
GENDER	MALE,FEMALE	N/A	MALE	N/A
TIME( MANUAL )	0:00~99:59	99:00~5:00( 1:00 )	0:00	1:00
HEIGHTCM/INCH	110.0~199.5/3'8"-6'5"	199.5~110.0/6'5"-3'8"	175.0/5'9"	0.5/1
WEIGHTKG/LB	10.0~199.8/23~440	199.8~10.0/440~23	70.0/155	0.2/0.5
DISTANCE	0.0~999.0	999.0~1.0	0.0	1.0
WATT	30 ~ 300	300 ~ 30	100	10
TARGET H.R.	60 ~ 220	220 ~ 60	90	1
AGE	10 ~ 99	99 ~ 10	30	1

AUTO POWER ON / OFF : DURING FOUR MINUTES WITHOUT ANY SIGNAL INPUT TO COMPUTER ,COMPUTER WILL GO INTO SLEEP MODE. WHEN PRESS START / PAUSE KEY OR START WORKOUT AGAIN, THE COMPUTER WILL AUTOMATICALLY POWER ON.

**THINGS YOU SHOULD KNOW BEFORE EXERCISING**

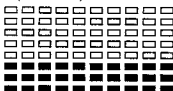
- A. THE VALUES CALCULATED OR MEASURED BY THE COMPUTER ARE FOR EXERCISE PURPOSE ONLY, **NOT FOR MEDICAL PURPOSE**.
- B. BEFORE OPERATE THIS COMPUTER, BE MAKE SURE TO PLUG THE CONNECTOR OF ADAPTOR. THE ADAPTOR SPECIFICATION REQUEST 6VDC / 1A OUTPUT.
- C. THE VARIABLES MAY NEED TO CHANGE IN THE PROGRAMS :

PROGRAMS	VARIABLES
P1 ~ P7	TIME, DISTANCE, AGE
P8	GENDER, HEIGHT, WEIGHT, AGE
P9	TIME, DISTANCE, TARGET H.R.
P10 ~ P12	TIME, DISTANCE, AGE
P13 ~ P14	TIME, DISTANCE, AGE, 10 COLUMNS
P15	TIME, DISTANCE, WATT, AGE

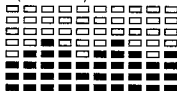
PLEASE NOTE THAT ONLY 1 VALUE OF TIME OR DISTANCE CAN BE ADJUSTED. BOTH ADJUSTMENTS DO NOT EXIST AT THE SAME TIME. FOR EXAMPLE, THE VALUE OF DISTANCE IS 0.0 WHILE THE VALUE OF TIME IS ADJUSTED TO BE ANY NUMBER EXCEPT 00:00 .

- D. PROGRAMS SELECTION :
- THERE ARE 15 PROGRAMS WITH 1 RECOVERY INCLUDING 1 MANUAL PROGRAM, 6 PRESET PROGRAMS, 1 BODY FAT PROGRAM, 4 HEART RATE CONTROL PROGRAMS, 2 USER SETTING PROGRAMS, 1 WATT CONTROL PROGRAM, AND 1 PULSE RECOVERY MEASURING.
- E. PROGRAM GRAPH :
- EACH GRAPH SHOWN IS THE PROFILE OF THE LOADING IN EACH COLUMN. WITH THE VALUE OF TIME COUNTING UP, EACH COLUMN IS 3 MINUTES THAT ALL THE COLUMNS MAKE UP 30 MINUTES. WITH THE VALUE OF TIME COUNTING DOWN, EACH COLUMN IS THE VALUE OF SETUP TIME DIVIDED BY 10. FOR EXAMPLE, IF THE TIME VALUE IS SETUP TO 40 MINUTES, EACH COLUMN WILL BE 40 MINUTES DIVIDED BY 10 COLUMNS (  $40/10=4$  ). THEN, EACH COLUMN WILL BE 4 MINUTES. THE FOLLOWING GRAPHS ARE ALL THE PROFILES IN THE MONITOR.

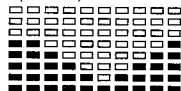
**PROGRAM  
1 (MANUAL)**



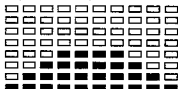
**PROGRAM  
2 (POLLING)**



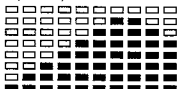
**PROGRAM  
3 (VALLEY)**



**PROGRAM  
4 (FAT BURN)**



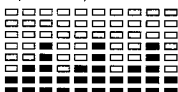
**PROGRAM  
5 (RAMP)**



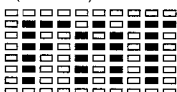
**PROGRAM  
6 (MOUNTAIN)**



**PROGRAM  
7 (RANDOM)**



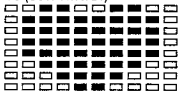
**PROGRAM  
8 (BODY FAT)**



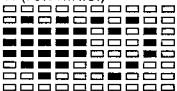
**PROGRAM  
9 (TARGET H.R.)**



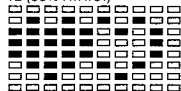
**PROGRAM  
10 (60% H.R.C.)**



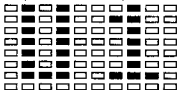
**PROGRAM  
11 (75% H.R.C.)**



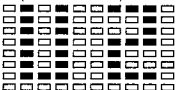
**PROGRAM  
12 (85% H.R.C.)**



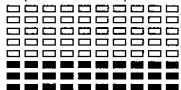
**PROGRAM  
13 (USER SETTING)**



**PROGRAM  
14 (USER SETTING)**



**PROGRAM  
15 (WATTCONTROL)**





**F. BODY TYPES :**

THERE ARE 9 BODY TYPES DIVIDED ACCORDING TO THE FAT% CALCULATED.

TYPE 1 IS FROM 5% TO 9.9%. TYPE 2 IS FROM 10% TO 14.9%. TYPE 3 IS FROM 15% TO 19.9%. TYPE 4 IS FROM 20% TO 24.9%. TYPE 5 IS FROM 25% TO 29.9%. TYPE 6 IS FROM 30% TO 34.9%. TYPE 7 IS FROM 35% TO 39.9%. TYPE 8 IS FROM 40% TO 44.9%. TYPE 9 IS FROM 45% TO 50%.

**G. BMR : BASAL METABOLISM RATIO. THE MONITOR WILL CALCULATE THE DATA OF GENDER, HEIGHT, WEIGHT AND AGE TO SHOW YOUR VALUE. THE VALUE WILL SHOW ON THE SCREEN FROM 1 ~ 9999 KCAL.**

**H. BMI : BODY MASS INDEX. THE MONITOR WILL CALCULATE THE DATA OF HEIGHT AND WEIGHT TO SHOW YOUR VALUE. THE VALUE WILL SHOW ON THE SCREEN FROM 1.0 ~ 99.9 ON SCREEN.**

**I. FAT % ( BODY FAT RATIO ) :**  
THE MONITOR WILL CALCULATE THE DATA OF GENDER, HEIGHT, WEIGHT AND AGE TO SHOW YOUR BODY FAT RATIO. THE VALUE WILL SHOW ON SCREEN FROM 5 ~ 50%.

**OPERATION INSTRUCTIONS**

**A. EXERCISING WITH A SPECIFIC GOAL :**

1. TIME CONTROL : SETS UP A PERIOD OF TIME TO EXERCISE. ( EXCEPT IN PROGRAM 8 )
2. DISTANCE CONTROL : SETS UP A CERTAIN DISTANCE TO EXERCISE. ( EXCEPT IN PROGRAM 8 )
3. BODY FAT CONTROL : COMPUTER DESIGNS VARIOUS PROGRAMS FOR DIFFERENT PEOPLE WITH DIFFERENT BODY FAT RATIO.
4. WATT CONTROL : KEEPS DIFFERENT BODIES BURNING IN DESIRE WATT CONSUMED.
5. HEART RATE CONTROL : KEEPS USERS TO EXERCISE UNDER A SAFE HEART-BEATING CONDITION

**B. PULSE RATE :**

THE WHOLE SET OF HEART RATE DETECTOR INCLUDE 2 SENSORS EACH SIDE. EACH SENSOR HAS 2 PIECES OF METAL PARTS. THE CORRECT WAY TO GET DETECTED IS TO GENTLY HOLD BOTH METAL PARTS EACH HAND. WITH THE GOOD SIGNALS PICKED UP BY THE COMPUTER, THE HEART MARK "♥" IN THE HEART RATE / BODY TYPE DISPLAY SHALL FLASH.

**NOTE :** THERE ARE TWO HEART RATE DETECTING SYSTEMS, HAND AND WIRELESS PULSE, BUILT IN MONITOR. HAND PULSE DETECTING BE FIRST PRECEDENCE. WHEN USER APPLY WIRELESS AND HAND PULSE SYSTEM TOGETHER. ONCE HAND PULSE IS DETECTED, THE LCD DISPLAY WILL DISPLAY HAND PULSE VALUE FIRST, NOT WIRELESS PULSE VALUE. IF APPLY WIRELESS PULSE SYSTEM, PLEASE SELECT THE FREQUENCY TO MATCH 5K HZ. IF THE FREQUENCY OF PULSE TRANSMITTER IS DIFFERENT THAN MONITOR BUILT, THE HEART RATE DISPLAY ON MONITOR WILL BE INTERMITTENT OR NO DISPLAY.

**C. MANUAL PROGRAM :**

PROGRAM 1 IS A MANUAL PROGRAM. PRESS ENTER KEY TO SELECT TIME ( OR DISTANCE ) AND AGE. THEN, PRESS ▲ OR ▼ KEY TO ADJUST THE VALUES. THE DEFAULT LEVEL OF LOADING IS 6. AFTER PRESSING START / PAUSE KEY TO EXERCISE, PLEASE ALSO APPLY THE HEART RATE DETECTOR APPROPRIATELY. USERS MAY EXERCISE IN ANY DESIRE LEVEL ( BY PRESSING ▲ OR ▼ DURING THE WORKOUT ) WITH A PERIOD OF TIME OR A CERTAIN DISTANCE. WITH THE INPUT OF AGE, THE COMPUTER MAY SUGGEST A TARGET HEART RATE TO EXERCISE. THE SUGGESTED HEART RATE IS 85% AS THE FORMULA CALCULATED 85% ( 220 AGE ). WITHOUT THE INPUT OF AGE, THE COMPUTER MAY SETUP THE DEFAULT VALUE BE 161 AS FORMULA 85% ( 220 30 ). IF THE HEART RATE DETECTED EQUALS TO OR GREATER THAN THE TARGET H.R., THE VALUE OF HEART RATE WILL KEEP FLASHING. **PLEASE NOTE THAT IT IS A WARNING FOR USERS TO SLOW DOWN OR TO LOWER THE LEVEL OF LOADING.**

D. PRESET PROGRAMS :

PROGRAM 2 TO PROGRAM 7 ARE THE PRESET PROGRAMS. PRESS ENTER KEY TO SELECT TIME ( OR DISTANCE ) AND AGE. THEN, PRESS ▲ OR ▼ KEY TO ADJUST THE VALUES. USERS MAY EXERCISE WITH DIFFERENT LEVEL OF LOADING IN DIFFERENT COLUMNS AS THE PROFILES SHOW. AFTER PRESSING START / PAUSE KEY TO EXERCISE, PLEASE ALSO APPLY THE HEART RATE DETECTOR ▲ OR ▼ TRANSMITTER APPROPRIATELY. USERS MAY ALSO EXERCISE IN ANY DESIRE LEVEL ( BY PRESSING OR DURING THE WORKOUT ) WITH A PERIOD OF TIME OR A CERTAIN DISTANCE. WITH THE INPUT OF AGE, THE COMPUTER MAY SUGGEST A TARGET HEART RATE TO EXERCISE. THE SUGGESTED HEART RATE IS 85% AS THE FORMULA CALCULATED  $85\% ( 220 - \text{AGE} )$ . WITHOUT THE INPUT OF AGE, THE COMPUTER MAY SETUP THE DEFAULT VALUE BE 161 AS FORMULA  $85\% ( 220 - 30 )$ . IF THE HEART RATE DETECTED EQUALS TO OR GREATER THAN THE TARGET H.R., THE VALUE OF HEART RATE WILL KEEP FLASHING. **PLEASE NOTE THAT IT IS A WARNING FOR USERS TO SPEED DOWN OR TO LOWER THE LEVEL OF LOADING.**

E. BODY FAT PROGRAM :

PROGRAM 8 IS A SPECIAL PROGRAM DESIGNED TO CALCULATE USERS' BODY FAT RATIO AND TO DESIGN A SPECIFIC LOADING PROFILE FOR USERS. WITH 9 DIFFERENT BODY TYPES, THE COMPUTER CAN GENERATE 9 DIFFERENT PROFILES FOR EACH. PRESS ENTER KEY TO SELECT GENDER, HEIGHT, WEIGHT, AND AGE. THEN, PRESS ▲ OR ▼ KEY TO ADJUST THE VALUES. AFTER PRESSING START / PAUSE KEY TO CALCULATE BODY FAT, PLEASE ALSO APPLY THE HEART RATE DETECTOR APPROPRIATELY. IF IT HAPPENS, PRESS START / PAUSE KEY TO CALCULATE AGAIN. THEN, THE CALCULATION VALUES OF FAT%, BMR, BMI, BODY TYPE, AND A DESIGNED PROFILE WILL SHOW UP SHORTLY. PRESS START / PAUSE KEY TO EXERCISE. THE PROFILE SHOWN IN THE DISPLAY IS SPECIALLY DESIGNED FOR YOUR BODY TYPE. THE TARGET HEART RATE WILL SETUP AS : TYPE1-3 IS  $55\% * ( 220 - \text{AGE} )$  TYPE4-6 IS  $65\% * ( 220 - \text{AGE} )$  TYPE7-9 IS  $75\% * ( 220 - \text{AGE} )$ . IF THE HEART RATE DETECTED EQUALS TO OR GREATER THAN THE TARGET H.R., THE VALUE OF HEART RATE WILL KEEP FLASHING. **PLEASE NOTE THAT IT IS A WARNING FOR USERS TO SPEED DOWN OR TO LOWER THE LEVEL OF LOADING**

F. ERROR MESSAGE : " E3 "

ONCE YOU DO NOT PUT YOUR HANDS ON THE SENSOR OR FIRMLY GRASPED, THE SCREEN WILL SHOW " E3 " .

TO SOLVE THIS PROBLEM, PLEASE PRESS THE MEASURE BUTTONS ONCE AGAIN, AND HOLD ON THE SENSOR WITH STRAIGHT ARMS IMMEDIATELY. PLEASE DO NOT MOVE YOUR BODY WHILE MEASURING.

NOTE : ONLY UNDER THE HAND PULSE FUNCTION AND THE BODY FAT WORKS.

G. HEART RATE CONTROL PROGRAMS :

PROGRAM 9 TO PROGRAM 12 ARE THE HEART RATE CONTROL PROGRAMS. IN PROGRAM 9, PRESS ENTER KEY TO SELECT TIME ( OR DISTANCE ) AND TARGET H.R. USERS MAY SETUP A TARGET HEART RATE TO EXERCISE IN A PERIOD OF TIME OR A CERTAIN DISTANCE. IN PROGRAM 10 TO PROGRAM 12, PRESS ENTER KEY TO SELECT TIME ( OR DISTANCE ) AND AGE. THEN, PRESS ▲ OR ▼ KEY TO ADJUST THE VALUES. USERS MAY EXERCISE IN A PERIOD OF TIME OR A CERTAIN DISTANCE WITH 60% MAX HEART RATE IN PROGRAM10, 75% MAX HEART RATE IN PROGRAM 11, AND 85% MAX HEART RATE IN PROGRAM 12. AFTER PRESSING START / PAUSE KEY TO EXERCISE, PLEASE ALSO APPLY THE HEART RATE DETECTOR APPROPRIATELY. IN THESE PROGRAMS, THE COMPUTER WILL ADJUST THE LEVEL OF LOADING ACCORDING TO THE HEART RATE DETECTED. FOR EXAMPLE, THE LEVEL OF LOADING MAY INCREASE WHILE THE HEART RATE DETECTED IS LOWER THAN TARGET H.R. ALSO, THE LEVEL OF LOADING MAY DECREASE WHILE THE HEART RATE DETECTED IS HIGHER THAN TARGET H.R. AS A RESULT, THE USER'S HEART RATE WILL BE ADJUSTED TO CLOSE THE TARGET H.R. IN THE RANGE OF TARGET H.R. 5 AND TARGET H.R. -5.

#### H. USER SETTING PROGRAMS :

PROGRAM 13 TO PROGRAM 14 ARE THE USER-SETTING PROGRAMS. USERS ARE FREE TO EDIT THE VALUES IN THE ORDER OF TIME ( OR DISTANCE ), AGE, AND THE LEVEL OF LOADING IN 10 COLUMNS. THE VALUES AND PROFILES WILL BE STORED IN THE MEMORY AFTER SETUP. AFTER PRESSING START/PAUSE KEY TO EXERCISE, PLEASE ALSO APPLY THE HEART RATE DETECTOR APPROPRIATELY. USERS MAY ALSO CHANGE THE ONGOING LOADING IN EACH COLUMN BY PRESSING ▲ OR ▼ KEY, AND THEY WILL NOT CHANGE THE LEVEL OF LOADING STORED IN THE MEMORY. WITH THE INPUT OF AGE, THE COMPUTER MAY SUGGEST A TARGET HEART RATE TO EXERCISE. THE SUGGESTED HEART RATE IS 85% AS THE FORMULA CALCULATED  $85\% (220 - \text{AGE})$ . WITHOUT THE INPUT OF AGE, THE COMPUTER MAY SETUP THE DEFAULT VALUE BE 161 AS FORMULA  $85\% (220 - 30)$ . IF THE HEART RATE DETECTED EQUALS TO OR GREATER THAN THE TARGET H.R., THE VALUE OF HEART RATE WILL KEEP FLASHING. **PLEASE NOTE THAT IT IS A WARNING AND SUGGESTION FOR USERS TO SPEED DOWN OR TO LOWER THE LEVEL OF LOADING.**

#### I. WATT CONTROL PROGRAM :

PROGRAM 15 IS A WATT CONTROL PROGRAM ( INDEPENDENT SYSTEM ), PRESS ENTER KEY TO SELECT THE VALUES OF TIME ( OR DISTANCE ), WATT, AND AGE. THEN, PRESS ▲ OR ▼ KEY TO ADJUST THE VALUES. AFTER PRESSING START / PAUSE KEY TO EXERCISE, PLEASE ALSO APPLY THE HEART RATE DETECTOR APPROPRIATELY. DURING THE EXERCISE, THE LEVEL OF LOADING IS NOT ADJUSTABLE BY USER. IN THIS PROGRAM, COMPUTER WILL ADJUST THE LEVEL OF LOADING ACCORDING TO THE VALUE OF WATT SETUP. FOR EXAMPLE THE LEVEL OF LOADING MAY INCREASE WHILE THE SPEED IS TOO SLOW. ALSO, THE LEVEL OF LOADING MAY DECREASE WHILE THE SPEED IS TOO FAST. AS A RESULT, THE CALCULATED VALUE OF WATT WILL CLOSE TO THE VALUE OF WATT SETUP BY USERS. WITH THE INPUT OF AGE, THE COMPUTER MAY SUGGEST A TARGET HEART RATE TO EXERCISE. THE SUGGESTED HEART RATE IS 85% AS THE FORMULA CALCULATED  $85\% (220 - \text{AGE})$ . WITHOUT THE INPUT OF AGE, THE COMPUTER MAY SETUP THE DEFAULT VALUE BE 161 AS FORMULA  $85\% (220 - 30)$ . IF THE HEART RATE DETECTED EQUALS TO OR GREATER THAN THE TARGET H.R., THE VALUE OF HEART RATE WILL KEEP FLASHING. **PLEASE NOTE THAT IT IS A WARNING AND SUGGESTION FOR USERS TO SETUP LOWER WATT AGAIN.**

#### J. PULSE RECOVERY :

IT IS A FUNCTION TO CHECK THE CONDITION OF PULSE RECOVERY WHEN STOP EXERCISING THAT IS SCALED FROM F1.0 TO F6.0 WHILE F1.0 MEANS THE BEST AND F6.0 MEANS THE WORST AND THE INCREMENT IS 0.1. THIS FUNCTION MAY REFLECT YOUR HEART PULSE RECOVERY ABILITY AND IMPROVE IT THROUGH EXERCISE. IN ORDER TO GET RATED CORRECTLY, USERS MUST TEST IT RIGHT AFTER THE WORKOUT FINISHED BY PRESSING RECOVERY KEY AND THEN STOP EXERCISING. AFTER THE KEY IS PRESSED, PLEASE ALSO APPLY THE HEART RATE DETECTOR APPROPRIATELY. THE TEST WILL LAST FOR 1 MINUTE AND THE RESULT WILL SHOW IN THE DISPLAY. WHEN PRESS AGAIN WILL OUT OF PULSE RECOVERY MODE.

NOTE : PROGRAM 1 TO 14 IS DEPENDENT SYSTEM. PROGRAM 15 IS INDEPENDENT SYSTEM ( WATT CONTROL PROGRAM ).  
THE VALUE OF WATT CONSUMPTION, PLEASE REFER :

**WATT TABLE ( DEPENDENT )**

LEVEL	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16
20	5.2	8	10	12	14.2	16.3	18.5	20.2	22	23.7	25.8	26.8	32.8	33.6	37.3	38.9
30	11.4	17.9	22.9	26.6	31.2	36.4	41.7	45.4	51.3	54.7	59.3	64.9	68.3	73.2	80.3	81.3
40	17.3	26.4	35.4	41.6	49	56.9	65	71.3	78.3	83.2	94.3	101.3	113.3	118.7	129.3	137
50	26.8	42.7	52.5	63.3	74.2	87.6	99.9	109.1	120.5	131	146.3	159	166.9	175.1	193.1	203.9
60	35	49.5	64	78.5	93	107.5	122	132.5	151	165.5	175	194.5	209	220	238	252
70	42	63	82	94	112	131	151	163	182	190	208	228	237	251	260	267
80	53	80	103	119	139	163	188	205	227	232	254	265	308	324	335	363
90	64	97	124	145	168	196	227	247	274	279	316	342	369	386	399	433
100	72	117	152	179	213	250	285	313	352	360	415	459	480	504	546	575