

# ELECTRONIC HAND DYNAMOMETER

**INSTRUCTIONS FOR USE** 



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(Please read instructions before using this hand dynamometer.)

#### **BRIEF INTRODUCTION**

The Camry ® Electronic Hand Dynamometer is a good match and companion for gymnasts, tennis players, rock climbers and also serves as a recuperating muscle training device for muscular injury as part of physical therapy. The grip-strength hand dynamometer comes with the following special features:

- 1. High precision power gauging, giving momentary digital read-out of gripping power.
- 2. Auto capturing of maximum achieved grip strength and display of the value.
- 3. Assessment of results according to age and gender group.
- 4. Saving/storage, and retrieval of results for different users.

#### **SPECIFICATIONS**

UNIT: kg / lb

MAX. CAPACITY: 90 kg / 198 lb

DIVISION (RESOLUTION) = 0.1 kg / 0.2 lb

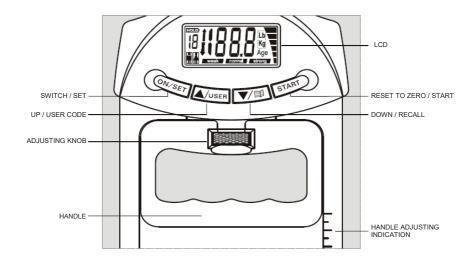
POWER: 2 x 1.5V AAA BATTERIES

TOLERANCE: ± 0.5 kg / 1 lb OPERATING ENVIRONMENT:

TEMPERATURE = 0~35°C; RELATIVE HUMIDITY = 30~90%

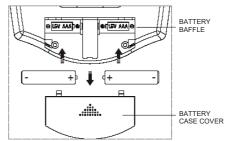
#### **FEATURES**

- 1. Design principle: bionics, ergonomics.
- 2. Adjustable handle, suitable for users of different ages, suitable for 5-position testing protocols.
- 3. Fashionable, easy-to-use design.
- 4. Equipped with high precision strain gauge sensor.
- 5. Easy-to-read 0.8" (21mm) LCD digits.
- 6. Mulit-functions including user data setting; grip testing; test result comparison, save and recall.

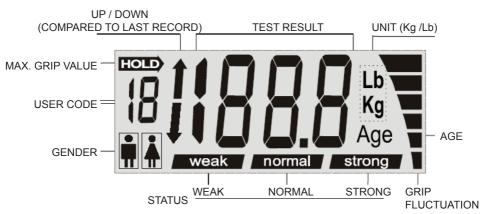


# OUTLINE TO REPLACE BATTERIES

- Open battery case cover at the back of dynamometer;
- · Take out used batteries;
- Install new batteries by putting one side of the battey beneath battery baffle and pressing down the other side. Please take note to polarity.



## LCD ICONS DESCRIPTION

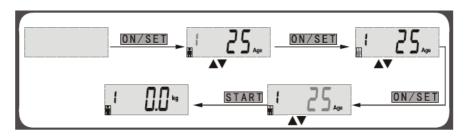


#### PRELIMINARY ADJUSTMENT

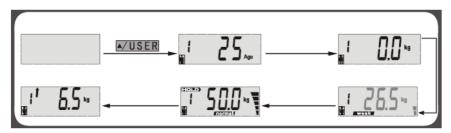
By turning the adjusting knob left or right, you can adjust the handle up or down to get an ideal grasp. eg: User with large hand can adjust the handle upwards by turning the adjusting knob the right. There are 5 pre-marked settings.



#### TO SET USER PARAMETERS

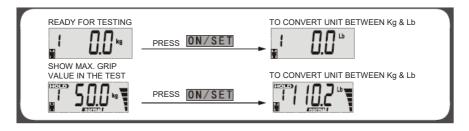


#### TO TEST UNDER USER MEMORY MODE



After testing, LCD will show user code, gender, max. grip value, and grip value status (weak, normal, strong). Press "ON / SET" 3 seconds to switch off. Auto shut-off occurs if LCD shows the same reading for 20 seconds.

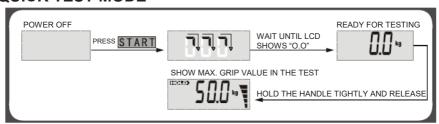
#### TO CONVERT UNIT



### TO RESET AND RETEST



#### **QUICK TEST MODE**



Press "ON/SET" 3 seconds to switch off. Auto shut-off occurs if LCD shows the same reading for 20 seconds.

## TO SAVE TEST RESULT



After saving, dynamometer will return to testing mode.

#### **RECALL TEST RESULT**



After recalling, you can press "ON/SET" to convert unit, or press "START" to start grip testing.

# APPENDIX: PHYSICAL STATUS ACCORDING TO THE RESULT GIVEN BY THE DYNAMOMETER (in kg)

AGE	MALE			FEMALE		
	WEAK	NORMAL	STRONG	WEAK	NORMAL	STRONG
10-11	<12.6	12.6-22.4	>22. 4	<11.8	11.8-21.6	>21.6
12-13	<19. 4	19.4-31.2	>31.2	<14.6	14. 6–24. 4	>24. 4
14—15	<28.5	28.5-44.3	>44.3	<15.5	15. 5-27. 3	>27.3
16-17	<32.6	32.6-52.4	>52. 4	<17. 2	17. 2-29. 0	>29.0
18—19	<35. 7	35. 7–55. 5	>55.5	<19. 2	19. 2-31. 0	>31.0
20—24	<36.8	36.8-56.6	>56.6	<21.5	21.5-35.3	>35.3
25—29	<37.7	37. 7-57. 5	>57.5	<25. 6	25. 6-41. 4	>41.4
30-34	<36. 0	36. 0-55. 8	>55.8	<21.5	21. 5-35. 3	>35. 3
35-39	<35.8	35.8-55.6	>55.6	<20.3	20.3-34.1	>34. 1
40-44	<35.5	35. 5-55. 3	>55.3	<18.9	18. 9-32. 7	>32. 7
45—49	<34.7	34. 7-54. 5	>54.5	<18.6	18. 6-32. 4	>32.4
50-54	<32.9	32.9-50.7	>50.7	<18.1	18. 1-31. 9	>31.9
55—59	<30.7	30. 7-48. 5	>48.5	<17.7	17. 7-31. 5	>31.5
60-64	<30.2	30. 2-48. 0	>48. 0	<17.2	17. 2-31. 0	>31.0
65-69	<28.2	28.2-44.0	>44.0	<15.4	15. 4-27. 2	>27. 2
70-99	<21.3	21. 3-35. 1	>35. 1	<14. 7	14. 7-24. 5	>24.5



#### **ADVICE FOR USE AND MAINTENANCE**

- 1. PLEASE TAKE NOTE TO POLARITY WHEN REPLACING BATTERIES;
- 2. AVOID TOUCHING THE LCD;
- IF DYNAMOMETER CANNOT BE SWITCHED ON, PLEASE CHECK IF BATTERIES ARE PROPERLY INSTALLED;
- 4. TREAT THIS DYNAMOMETER WITH CARE AS IT IS A PRECISION INSTRUMENT;
- 5. IF THE DYNAMOMETER IS NOT GOING TO BE USED FOR LONG TIME, REMOVE BATTERIES:
- 6. NOT SUITABLE FOR COMMERCIAL USE.