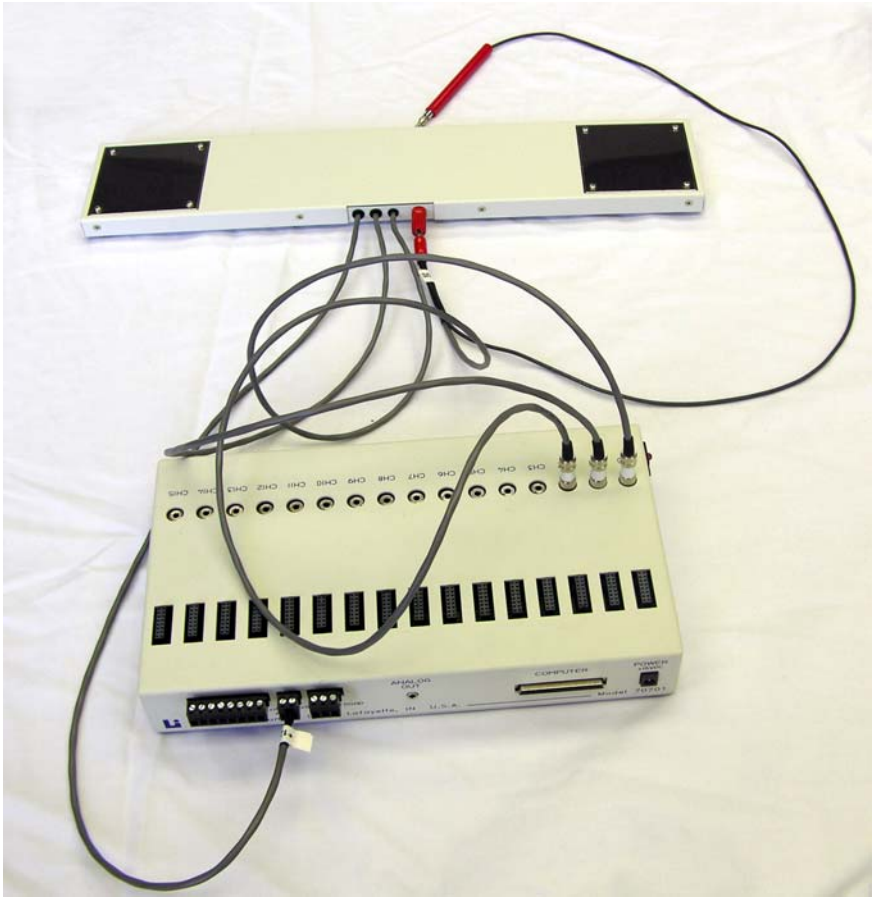
Model 35920

FORCE TAPPING BOARD WITH DATALAB 2000

USER'S MANUAL



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Description

This Force Tapping Board is a variation of the Tapping Board Apparatus, Model 32012, which helps evaluate an elementary psychomotor skill. This version is connected to a Data Acquisition System to count the number of taps as well as measure the amount of force applied to each of those taps. While using a metal-tipped stylus, the subject's task is to tap, as rapidly as possible. When connected to our Datalab 2000 Data Acquisition System, Model 70700, the force of each tap will be displayed as a wave form on your computer screen. These wave forms and all the raw data will be stored in a data file for analysis.

System Specifications

Line Voltage 105/125 V AC 50/60 Hz

Operation Instructions

Datalab Software:

A. Install the Datalab Software by following the Datalab Installation Instructions.
B. Connect the Datalab Interface Bed to your computer.
C. Read the Datalab Instruction Manual and get to know your way around the Datalab Software.

Connecting the Tapping Board to the Datalab Interface Bed:

A. Connect the Red Banana Clip end (labeled "Stylus") of the loose, double wire to the Red port on the back of the Tapping Board.
B. Connect the Stereo Phono Plug end (labeled "Ch 2") of the loose, double wire into the Ch 2 Port of the Datalab Bed.
C. Connect the wire labeled "+12V" into the back of the Datalab Bed as shown here:

Note: You have to remove the small piece from the port and replace it with the "+12V" plug. Just simply pull the one piece out and push the new one in. No screwdriver is required.

Connecting the Tapping Board to the Datalab Interface Bed (*continued..)*:

D. Connect the wire labeled "Ch 0" into the Ch 0 Port of the Datalab Bed.
E. Connect the wire labeled "Ch 1" into the Ch 1 Port of the Datalab Bed.

Configuration of Software:

A. Go into the 4-Graph Acquisition Mode of the Software.
B. Select CONFIGURE > CHANNELS
C. Select Channel 0
D. Under **Signal Label** type in "Tap Left" (or whatever other label you want to represent the force graph for the left plate of the tapping board).
E. Click the **Calibrate** button
***You will need a weight (preferably a 2kg weight) to calibrate the force plates of the Tapping Board.*
    1. Under **Minimum** change the **Eng. Value** to 0.000
    2. Click the **Accept** button in the **Minimum** section
    3. Place the weight on the Left Plate of the Tapping Board
    4. Click the **Accept** button in the **Maximum** section
    5. Click **OK** to exit the Calibration Screen
F. In the CHANNEL CONFIGURATION dialog box, Select Channel 1
G. Under **Signal Label** type in "Tap Right" (or whatever other label you want to represent the force graph for the right plate of the tapping board).
H. Click the **Calibrate** button
***You will need a weight (preferably a 2kg weight) to calibrate the force plates of the Tapping Board.*
    1. Under **Minimum** change the **Eng. Value** to 0.000
    2. Click the **Accept** button in the **Minimum** section
    3. Place the weight on the Left Plate of the Tapping Board
    4. Click the **Accept** button in the **Maximum** section
    5. Click **OK** to exit the Calibration Screen
I. In the CHANNEL CONFIGURATION dialog box, Select Channel 2
J. Under **Signal Label** type in "Report" (or whatever other label you want to represent the graph for the number of taps made by the stylus onto the plates of the tapping board).
K. Under **Units** type in "Taps"
L. Click **OK**

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Configuration of Sample Rate:

A. Select CONFIGURE > SETTINGS
B. Under the TIMING Tab, Change the **Sample Rate** to 1000 samples/sec
C. Click **OK**

Setting Up Filters:

A. In the **4 Graph Acquisition** view window, choose the channels you want to view for each graph by using the drop down menu under the arrow in the upper left-hand corner of each graph.
B. For Channels 0 and 1 (or in our case, "Left Tap" and "Right Tap"), turn on the filter as follows:
   1. Click on the Filter radio button above the "Left Tap" graph to enable the filter.
   2. A dialog box will appear.
   3. Select the **Digital** Type Filter
   4. Select **Low Pass**
   5. Be sure the attenuation is set to **50 Hz**

*C. Once you get to the **Analysis** view in the Software, you will need to turn on the Digital Filter again to assure you do not see the "noise" produced during testing.

Datalab Instructions and Troubleshooting:

Please see the Datalab Hardware and Software Manuals for futher information on this system.

Ordering Information:

All phone orders must be accompanied by a hard copy of your order. All must include the following information:
1) Complete billing and shipping addresses
2) Name and department of end user
3) Model number and description of desired item(s)
4) Quantity of each item desired
5) Purchase order number or method of payment
6) Telephone number

DOMESTIC TERMS

There is a $50 minimum order. Open accounts can be extended to most recognized educational institutions, hospitals and government agencies. Net amount due 30 days from the date of shipment. Enclose payment with the order; charge with VISA, MasterCard, American Express; or pay COD. We must have a hard copy of your order by mail or fax. Students, individuals and private companies may call for a credit application.

INTERNATIONAL PAYMENT INFORMATION

There is a $50 minimum order. Payment must be made in advance by: draft drawn on a major US bank; wire transfer to our account; charge with VISA, MasterCard, American Express; or confirmed irrevocable letter of credit. Proforma invoices will be provided upon request.

RETURNS

Equipment may not be returned without first receiving a Return Goods Authorization Number (RGA).

When returning equipment for service, please call Lafayette Instrument to receive a RGA number. Your RGA number will be good for 30 days. Address the shipment to: Lafayette Instrument Company, 3700 Sagamore Parkway North, Lafayette, IN 47904, U.S.A. Shipments cannot be received at the PO Box. The items should be packed well, insured for full value, and returned along with a cover letter explaining the malfunction. Please also state the name of the Lafayette Instrument representative authorizing the return. An estimate of repair will be given prior to completion ONLY if requested in your enclosed cover letter. We must have a hard copy of your purchase order by mail or fax, or repair work cannot commence.

WARRANTY

Lafayette Instrument guarantees its equipment against all defects in materials and workmanship to the ORIGINAL PURCHASER for a period of one (1) year from the date of shipment, unless otherwise stated. During this period, Lafayette Instrument will repair or replace, at its option, any equipment found to be defective in materials or workmanship. If a problem arises, please contact our office for prior authorization before returning the item. This warranty does not extend to damaged equipment resulting from alteration, misuse, negligence or abuse, normal wear or accident. In no event shall Lafayette Instrument be liable for incidental or consequential damages. There are no implied warranties or merchantability of fitness for a particular use, or of any other nature. Warranty period for repairs or used equipment purchased from Lafayette Instrument is 90 days.

DAMAGED GOODS

Damaged equipment should not be returned to Lafayette Instrument prior to thorough inspection.

When a shipment arrives damaged, note damage on delivery bill and have the driver sign it to acknowledge the damage. Contact the delivery service, and they will file an insurance claim. When damage is not detected at the time of delivery, contact the carrier and request an inspection within 10 days of the original delivery. Please call the Lafayette Instrument Customer Service Department for a return authorization for repair or replacement of the damaged merchandise.

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