

Two-Hand Coordination Test

User Instructions



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Lafayette Instrument Two-Arm Coordination Test

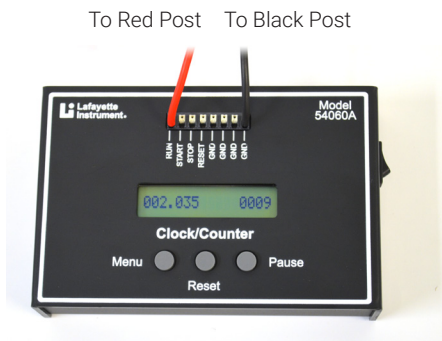
Setup

In preparation for the Two Arm Coordination Test, you will need an Economy Clock/Counter (suggested is LIC Model 54060A), two connecting cables (suggested is LIC Model 58085), and a stopwatch (suggested is LIC Model 00033A).

Install the roto-clip onto stylus and seat in groove. Place spring over stylus and from the underside of the smaller arms, insert the stylus into the center pivot hole. Thread castle nut onto stylus.

The Tracing Apparatus is connected to the Economy Clock/Counter, using the two connecting cables. The first cable connects the black binding post on the Tracing Apparatus to the "GND" input on the Economy Clock/Counter. Likewise, the second cable connects the red binding post of the Tracing Apparatus to the "RUN" input on the Economy Clock/Counter.

The client sits. Each hand holds a handle of the Tracing Apparatus. Set the Clock/Counter to zero. Set the stopwatch to zero.



Economy Clock/Counter
Model 54060A

Maintenance

The black star pattern on the Tracing Apparatus should be inspected periodically for scratches. If a scratch is deep enough, when the stylus touches it, it will be recorded as a contact (error).

You may repair a scratch on the black star with the use of black model airplane paint.

Factor Description

This factor involves the ability to move both arms in a simultaneous and coordinated manner. The movement involved is that of the whole arm, as opposed to the two-hand coordination factor. Two-arm coordination is most related to the D.O.T. (Things category of Operating-Controlling and Driving-Operation) While it is used in operating a large amount of production equipment, it is mostly clearly seen in the job of crane operator. Even though many jobs require two-arm coordination also require, at least, some degree of visual acuity, the two are not necessarily related. Therefore, blind individuals should have the same range of ability in two-arm coordination as the sighted population. Also, two-arm coordination does not use grasping ability like the manual dexterity.

Administration

The client sits directly in front of the two-arm tracing apparatus. Be sure that the apparatus has been assembled according to the set-up instructions.

The test is composed of two operations: tracing a star in a clockwise direction and in a counter-clockwise direction. Show the client how to manipulate the stylus by moving the handles of the apparatus; spreading the handles makes the stylus move toward the top of the board; bringing the handles together moves the stylus downward on the board. Lateral movement is accomplished by simultaneously moving both handles to the left or to the right.

It is then explained to the client that the objective of the test is to manipulate the handles in such a way as to keep the stylus on the black star pattern. During the test, the Clock/Counter will record one contact (error) each time the stylus leaves the black star pattern.

To begin the practice session, place the stylus on the top point of the star. The client is given about one minute of practice time to move the stylus around the star. After you are satisfied that he/she understands how the apparatus works, return the stylus to the top point of the star.

Reset the Clock/Counter and stopwatch to zero. Tell the client that when you say "START", he/she should begin moving the stylus in a clockwise direction (to the right) around the star. Also, tell him or her that the score is equally weighted for speed as well as accuracy. Therefore, he/she should move the stylus around the star as quickly as possible, making as few contacts (errors) as possible.

Turn on the Clock/Counter, tell the person to begin, and simultaneously start the stopwatch. When the client returns to the stylus to the top point of the star, stop the stopwatch. Then, turn off the Clock/Counter. Do not reset either the stopwatch or the Clock/Counter, since the score is the total for time and the total for errors for both tasks.

Next, tell the client that when you say "START", he/she should begin moving the stylus in a counter-clockwise direction (to the left) while simultaneously starting the stopwatch. When the person returns the stylus to the top of the star, stop the watch. Then turn off the Clock/Counter and record the scores.

Modifications

A person with an arm prosthesis should be encouraged to try the test, if the individual has a usable prosthesis, the arm of the apparatus can be held above the handle with prosthetic hook. The test is given in the normal way.

If the client is unable to grasp the handle, use a rubber band or string around the person's hand, and the handle, to allow him or her to control the stylus.

A person with CP should be encouraged to try the test, if he/she is unable to control the stylus, move on to the next test, and record an "X" (for cannot take) in place of the two scores. If the client appears to have some control, have him or her try the first task (clockwise). If at the end of the task, the time is greater than 230 seconds and the number of errors is greater than 33, there is no reason to do the second operation, since the person cannot receive a lower rating. Enter the scores received in the first task.

Scoring

The scores are total times for both tasks and total errors for both tasks:

- Two-Arm Time: HIGH = 70; AVG = 100; LOW = 200
- Two-Arm Accuracy: HIGH = 1; AVG = 5; LOW = 20

Terms and Conditions

LIC Worldwide Headquarters

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Phone, Fax, Email or Mail-in Orders

All orders need to be accompanied by a hard copy of your purchase order. All orders must include the following information:

- Quantity
- Part Number
- Description
- Your purchase order number or method of pre-payment
- Your tax status (include tax-exempt numbers)
- Shipping address for this order
- Billing address for the invoice we'll mail when this order is shipped
- Signature and typed name of person authorized to order these products
- Your telephone number
- Your email address
- Your FAX number

Domestic Terms

There is a \$50 minimum order. Open accounts can be extended to most recognized businesses. Net amount due 30 days from the date of shipment unless otherwise specified by us. Enclose payment with the order; charge with VISA, MasterCard, American Express, or pay COD. We must have a hard copy of your purchase order by mail, E-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 transfers to our account; charge with VISA, MasterCard, American Express, or confirmed irrevocable letter of credit. Proforma invoices will be provided upon request.

Exports

If ordering instrumentation for use outside the USA, please specify the country of ultimate destination, as well as the power requirements (110V/60Hz or 220V/50Hz). Some model numbers for 220V/50Hz will have a *C* suffix.

Quotations

Quotations are supplied upon request. Written quotations will include the price of goods, cost of shipping and handling, if requested, and estimated delivery time frame. Quotations are good for 30 days, unless otherwise noted. Following that time, prices are subject to change and will be re-quoted at your request.

Cancellations

Orders for custom products, custom assemblies or instruments built to customer specifications will be subject to a cancellation penalty of 100%. Payment for up to 100% of the invoice value of custom products may be required in advance. Cancellation for a standard Lafayette Instrument manufactured product once the product has been shipped will normally be assessed a charge of 25% of the invoice value, plus shipping charges. Resell items, like custom products, will be subject to a cancellation penalty of 100%.

Exchanges and Refunds

Please see the cancellation penalty as described above. No item may be returned without prior authorization of Lafayette Instrument Company and a Return Goods Authorization (RGA#) number which must be affixed to the shipping label of the returned goods. The merchandise should be packed well, insured for the full value and returned along with a cover letter explaining the reason for return. Unopened merchandise may be returned prepaid within thirty (30) days after receipt of the item and in the original shipping carton. Collect shipments will not be accepted. Product must be returned in saleable condition, and credit is subject to inspection of the merchandise.

Repairs

Instrumentation may not be returned without first receiving a Return Goods Authorization Number (RGA). When returning instrumentation 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, USA.

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. 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 for non-warranty repairs.

Damaged Goods

Damaged instrumentation should not be returned to Lafayette Instrument prior to a thorough inspection. If 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. If damage is not detected at the time of delivery, contact the carrier/shipper and request an inspection within 10 days of the original delivery. Please call the Lafayette Instrument Customer Service Department for repair or replacement of the damaged merchandise.

Limited Warranty

Lafayette Instrument Company warrants equipment manufactured by the company to be free of defects in material and workmanship for a period of one year from the date of shipment, except as provided hereinafter. The original manufacturer's warranty will be honored by Lafayette Instrument for items not manufactured by Lafayette Instrument Company, i.e. resell items. This assumes normal usage under commonly accepted operating parameters and excludes consumable products.

Warranty period for repairs or used instrumentation purchased from Lafayette Instrument is 90 days. Lafayette Instrument Company agrees either to repair or replace, at its sole option and free of part charges to the customer, instrumentation which, under proper and normal conditions of use, proves to be defective within the warranty period. Warranty for any parts of such repaired or replaced instrumentation shall be covered under the same limited warranty and shall have a warranty period of 90 days from the date of shipment or the remainder of the original warranty period whichever is greater. This warranty and remedy are given expressly and in lieu of all other warranties, expressed or implied, of merchantability or fitness for a particular purpose and constitutes the only warranty made by Lafayette Instrument Company.

Lafayette Instrument Company neither assumes nor authorizes any person to assume for it any other liability in connection with the sale, installation, service or use of its instrumentation. Lafayette Instrument Company shall have no liability whatsoever for special, consequential, or punitive damages of any kind from any cause arising out of the sale, installation, service or use of its instrumentation. All products manufactured by Lafayette Instrument Company are tested and inspected prior to shipment. Upon prompt notification by the Customer, Lafayette Instrument Company will correct any defect in warranted equipment of its manufacture either, at its option, by return of the item to the factory, or shipment of a repaired or replacement part. Lafayette Instrument Company will not be obliged, however, to replace or repair any piece of equipment, which has been abused, improperly installed, altered, damaged, or repaired by others. Defects in equipment do not include decomposition, wear, or damage by chemical action or corrosion, or damage incurred during shipment.

Limited Obligations Covered by this Warranty

1. In the case of instruments not of Lafayette Instrument Company manufacture, the original manufacturer's warranty applies.
2. Shipping charges under warranty are covered only in one direction. The customer is responsible for shipping charges to the factory if return of the part is required.
3. This warranty does not cover damage to components due to improper installation by the customer.
4. Consumable and/or expendable items, including but not limited to electrodes, lights, batteries, fuses, O-rings, gaskets, and tubing, are excluded from warranty.
5. Failure by the customer to perform normal and reasonable maintenance on instruments will void warranty claims.
6. If the original invoice for the instrument is issued to a company that is not the company of the end user, and not an authorized Lafayette Instrument Company distributor, then all requests for warranty must be processed through the company that sold the product to the end user, and not directly to Lafayette Instrument Company.

Export License

The U.S. Department of Commerce requires an export license for any polygraph system shipment with an ULTIMATE destination other than: Australia, Japan, New Zealand or any NATO Member Countries. It is against U.S. law to ship a Polygraph system to any other country without an export license. If the ultimate destination is not one of the above listed countries, contact us for the required license application forms.