



## Lafayette Instrument Company Model #63013 Deluxe Multi-Choice Reaction Time Apparatus

### *DESCRIPTION:*

The 63013, Multi-Choice Reaction Timer, is our most sophisticated reaction time unit designed for maximum flexibility. This unit comes complete with a Master Control which contains a 1/100 second digital clock, pre-stimulus intensity control, variable cue-stimulus delays, a stimulus selector and a response selector; a Response Unit with three telegraph keys and auxiliary; a four mode Stimulus Unit with a 1-second cue light, a three colored stimulus light (red, green, blue), and auditory 2800 Hz Sonalert, and auxiliary; a Slide Viewer; and electronic Voice Reaction-Timer Control with desk mike, throat mike, push button box, and all the necessary cables and connectors.

### *SPECIFICATIONS:*

|                               |                      |
|-------------------------------|----------------------|
| <b>Line Voltage:</b>          | 105/125V AC 50/60 Hz |
| <b>Minimum Reaction Time:</b> | 1/100 second         |
| <b>Maximum Reaction Time:</b> | 999.99 seconds       |
| <b>Auxiliary Stimulus:</b>    | 6 volts AC to 1 amp  |

### *CONTROLS:*

**Power Switch:** This is the main power switch of the unit and should be off while making all connections.

**Initiate:** The initiate switch is used to start a trial cycle, activating the cue light, stimulus and clock. Once a cycle is initiated, this key may be released; however, it does not have to be released in order for a response to be recorded. This feature is particularly useful in accurately measuring fast reaction times.

**Stimulus Selector:** The Stimulus Selector determines which stimulus appears with the onset of the clock. The three colored lights (blue, red, and green) and buzzer (Sonalert) are all located in the stimulus unit housing. The Viewer is used to present a 35mm slide. In the AUDIO position, the timer is initiated whenever Channel #1 of the Voice Reaction-Time Apparatus is activated. In the AUX position, any 6 volt AC device drawing up to 1 ampere will be activated. The NONE position allows the timer to be activated without any related stimulus. This may be especially useful when using the External Initiate.

**Response Selector:** The Response Selector switch determines which response stops the reaction timer. For example, when set to Key 1, the first telegraph key and only that will stop the timer. Any auxiliary device providing a switch closure will stop the timer when connected to the auxiliary pin sockets on the telegraph key board when the response Selector is on AUX. When in the AUDIO position, the timer will stop whenever Channel #2 of the Voice Reaction-Timer is activated.

**Cue Duration:** The actual cue duration is fixed at 1 second; however, this control may be used to extend the delay between cue offset and stimulus onset from 1-10 seconds. When this switch is off, the cue will not be presented.

**Pre-Level Intensity:** The Pre-Level intensity contact is used to keep the filament of the stimulus lamps hot to reduce thermal delay time. When this control is fully counter-clockwise, the stimulus lamps will not be visible. By adjusting this control clockwise, it is possible to perform reaction time tests on different thresholds and j.n.d.'s. Note that this control is only used for the three colored lamps in the stimulus unit.

**Reset:** The Reset push button may be used to ABORT a trial at any given time.

**External Initiate:** Located on the back panel, any switch closure across these binding posts will perform the same function as the front panel initiate switch.

## **OPERATION:**

Placement of the stimulus units and response units should be as far as possible from the control unit since the clock clutch makes an audible click that may add an extraneous factor to your study.

### ***Basic operation without 63040 Electronic Voice Reaction-Time Apparatus:***

1. Connect each stimulus and response unit to the appropriate socket on the back panel
2. Plug the control unit to any convenient AC outlet
3. Reset the clock
4. Select the desired Stimulus, Response, Cue Duration, and Pre-Level Intensity
5. Press the Initiate Switch to start a trial cycle
6. When the appropriate response is made, the clock will stop

### ***Basic operation with 63040 Electronic Voice Reaction-Time Apparatus:***

1. Connect the supplied four conductor cables to the 63040 as follows:
  - a. Connect the red wire to the N.O. contact of Channel #1
  - b. Connect the black wire to the C. contact of Channel #1
  - c. Connect the white wire to the N.O. contact of Channel #2
  - d. Connect the green wire to the C. contact of Channel #2
  - e. Plug the Cinch-Jones connector into the appropriate socket on the 63013 control panel
2. Plug the 63040 and the 63013 control units into any convenient AC outlet
3. Connect the microphones and adjust the 63040 according to the attached instructions
4. Reset the clock.
5. Place the stimulus selector on AUDIO and the response selector on AUDIO
6. Any auditory stimulus on Channel #1 will now start the reaction timer, while an auditory response on Channel #2

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will stop the reaction timer.

7. Non-Auditory stimulus or response selections may be mixed with one AUDIO selection if desired. For example,

Select:

- a. Stimulus selector—Green
- b. Cue Duration—5 seconds
- c. Pre-Level—OFF
- d. Response—AUDIO

Press Initiate:

- a. Cue appears for 1 second
- b. 5 second delay
- c. Green light appears, simultaneously starting the reaction clock.
- d. An audio response on Channel #2 will stop the clock and extinguish the light.



## TROUBLE SHOOTING:

1. **Problem:** Pilot light does not light.  
**Solution:** Replace fuse on back panel with ¼ amp. Slo-Blo fuse.
2. **Problem:** Unit does not always initiate.  
**Solution:**
  - a. Does unit initiate some stimuli but not others? If so, check those stimuli which are not functioning.
  - b. Do the stimuli appear without activating the clock? If so, check for low line voltage or a defective clock.
  - c. Does the clock initiate without the stimuli? Check for a loose connector on the 63013 back panel.
  - d. Does the cue light fail? Because of the circuitry involved, the cue delay may not be set for less than the actual cue onset time. It may, therefore, be necessary to advance the delay time to 1 or 1.5 seconds.
3. **Problem:** The response keys do not operate.  
**Solution:**
  - a. Check the plug on the 63013 back panel.
  - b. Check for loose wires on the board.
  - c. Check for particles on contacts of keys.
4. **Problem:** The Visual Stimuli fail to extinguish.  
**Solution:** Check that the pre-level control has not been set too high.

## REFERENCES:

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*Notes:*

## 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; 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; 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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