Activity Sensor Pads

User’s Manual

shown with Portable Subject’s Chair Model 76877P (sold separately)

Lafayette Instrument

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Description

Seat Activity Sensor Pad Model 76879S
Measurements: 10.0” x 14.0” x 0.5”, 0.95 lbs

Arm Activity Sensor Pads Model 76879A (2)
Measurements: 6.0” x 14.0” x 0.5”, 0.58 lbs (each)

Feet Activity Sensor Pads Model 76879F (2)
Measurements: 7.0” x 14.0” x 0.5”, 0.63 lbs (each)

The Lafayette Activity Sensors are accessories to the Lafayette Instrument LX4000 and LX5000 computerized polygraph systems. They are designed to detect subtle as well as gross movements. By providing a graphic record of subject movement, the Activity Sensors allow the polygraph examiner to observe the subject’s movement that may not be seen by the examiner during observation.

The Activity Sensor Pads can be located under the seat, arms, and feet of the subject. When used with our 76877P chair the seat sensor can be placed inside the seat cushion for covert operation.

The Activity Sensors are precision instruments capable of detecting very subtle subject movement. Although the Activity Sensors are very sensitive, their durable design is kept simple for ease of operation and to provide many years of trouble-free operation.

Because of Lafayette’s unique design, the activity sensor can be used on almost any subject chair. Simply lay the Pads on the seat and arms of the chair and the Foot Pads on the floor. Please note that the external pouches are only protective covers for the internal components. The external pouches can be easily removed and cleaned in a washing machine when soiled.
Precautions

• The Activity Sensor Pads should be treated with care as any other instrument
• Take care to route the tubing / cables to avoid trip hazards as much as possible
• Avoid crushing or pinching the tubing
• Do not pick up the sensor using the cable or tubing
• Storage of the Activity Sensor Pads in any state other than flat may affect sensitivity
• Do not apply excessive weight or strain to the cable entry point on the sensor
• Protect Activity Sensor Pads from puncture

Sensor and DAS Installation Instructions

To connect the Sensors you simply connect the stereo cable into the Dongle attached to the Sensor, and then attach the other end of the connection cable to your polygraph instrument.

If you are using an LX5000 or a newer LX4000 instrument your connection cable will have a stereo plug on both ends. If you are using an older LX4000 instrument your connection cable will have a stereo plug on one end and a CAT5 plug on the other end, and you will connect the stereo plug into the Dongle of the Sensor and the CAT5 plug will connect into one of your auxiliary channels of your LX4000. Note: You will then need to turn on your auxiliary channel through the Lafayette Software by going to Tools, Preferences, then click on the auxiliary channel you are using and enable trace.
Activity Sensor Troubleshooting Guide

<table>
<thead>
<tr>
<th>Problem</th>
<th>Action</th>
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<tbody>
<tr>
<td>Sensor Pad does not react to movement.</td>
<td>• Ensure the cable is firmly connected to the Dongle.</td>
</tr>
<tr>
<td></td>
<td>• Ensure the cable is firmly connected to the DAS.</td>
</tr>
<tr>
<td></td>
<td>• Verify Dongle is plugged into AUX channel that is being displayed.</td>
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<td></td>
<td>• Check for pinched tubing.</td>
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<td></td>
<td>• Gain setting may be too low.</td>
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<tr>
<td>Signal from Sensor Pad flat lines or “rails” with activity.</td>
<td>• Dongle / Sensor Pad has been disconnected from the tubing and improperly reconnected – follow instructions for proper connection.</td>
</tr>
<tr>
<td></td>
<td>• Ensure the cable is firmly connected to the DAS.</td>
</tr>
<tr>
<td></td>
<td>• Gain setting on DAS may be too high.</td>
</tr>
<tr>
<td></td>
<td>• Ensure Polygraph Subject's body weight is within established range.¹</td>
</tr>
<tr>
<td>Signal from Sensor Pad is erratic.</td>
<td>• Dongle / Sensor Pad has been disconnected from the tubing and improperly reconnected – follow instructions for proper connection.</td>
</tr>
<tr>
<td></td>
<td>• Ensure the cable is firmly connected to the Dongle.</td>
</tr>
<tr>
<td></td>
<td>• Ensure the cable is firmly connected to the DAS.</td>
</tr>
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Recommended Preliminary Settings for Activity Sensor Pads

<table>
<thead>
<tr>
<th>Sensor Pad(s)</th>
<th>Preliminary Gain Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arms</td>
<td>4</td>
</tr>
<tr>
<td>Seat</td>
<td>2¹</td>
</tr>
<tr>
<td>Feet</td>
<td>3</td>
</tr>
</tbody>
</table>

¹Polygraph Subject established weight range: 98 – 450 lbs. Gain settings may need to be adjusted if outside this established range.
Instructions for the Proper Connection of Dongle / Sensor Pads

If you find it necessary to replace the tubing, shorten the length of the tubing for a Sensor Pad, or if the Dongle / Sensor Pad becomes disconnected from the tubing, please follow the instructions for proper connection as described below:

1. Ensure the Sensor Pad is connected to the tubing and that the tubing is on the in-line connector completely. If it is disconnected, connect it now.

2. If the Dongle is connected at this point, disconnect it by firmly holding the tubing on both sides of the small in-line connector for the Seat Activity Sensor, or by firmly holding the Dongle tubing and the small “T” connector for the Arms / Feet Activity Sensors and pulling the tubing from the connector.

3. Place the Activity Sensor Pads on a solid, flat surface and smooth the Activity Sensor Pads out with your hands to ensure the Activity Sensor Pads are as flat as possible and release. **DO NOT** place any weight source such as a book or a box on the Sensor Pads.

4. Without lifting or otherwise moving the Activity Sensor Pads connect the Dongle tubing to the small in-line connector (for the Seat Activity Sensor) or the small “T” connector (for the Arms / Feet Activity Sensors) and ensure the tubing is on the connector completely.

5. The Activity Sensor Pads are now ready for use.

*Please call your Lafayette Instrument sales or service representative to order more Sensors or for any further information concerning the installation and operation of the Activity Sensor.*
User Notes
Enter any additional notes in this area for your convenience.
Authorization Number (RGA). When returning instrumentation for service, Repairs will not be accepted. Product must be returned in saleable condition, and credit for the full value and returned along with a cover letter explaining the reason for the label of the returned goods. The merchandise 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.