

# Lafayette Nosepoke Quick Start Guide



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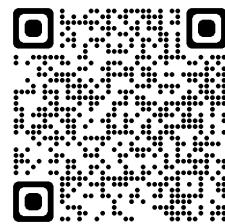
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# Lafayette Nosepoke

## Download Full User Manual

It is important that all users review the full manual available via our website. The manual search and download area on our website can be reached by QR code or this link:

<https://www.lafayetteinstrument.com/manuals>



Enter one of the below model numbers in the provided manual field on search page.

## Products

- 80116T: Nosepoke with Tri-Color Light (mouse)
- 80116TM: Nosepoke with Tri-Color Light on standard modular panel (mouse)
- 80116TR: Nosepoke with Tri-Color Light (rat)
- 80116TRM: Nosepoke with Tri-Color Light on standard modular panel (rat)
- 80117RM: Nosepoke with Tri-Color Light, Conical Entry, Liquid Delivery, and extra relief on a standard modular panel (rat)

## Description

The Lafayette Instrument Company Nosepokes described in this guide are used for the conditioning of animals with computer controlled operant systems using ABET, ABET II or other computer interface and software. They are designed for reliable photocell detection when a subject blocks the infrared beam in the Nosepoke environment. All are equipped with a tricolor light for presenting different light based stimuli. In addition, the 80117RM has an oversized plastic surround and specially designed conical hole for animals with headstages as well as provisions for liquid delivery.

## Parts Included

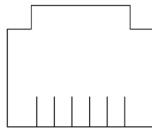
- Nosepoke
- 6-pin Modular cable
- 2.5 mm cable

## Wiring Instructions to ABET Model 81408 and 81409 I/O Blocks

The 80116T/R series Nosepoke connects to the 81409, 81508, or 81530 Core Interface via the stripped and tinned ends of the 6 pin modular cable. Three output lines are required for all tri-color functionality.

## Connector Diagram

1 = Output 3  
2 = Ground 0V  
3 = Output 2  
4 = Ground 0V  
5 = Output 1  
6 = +28vdc



Colors May Vary

**NOTE:** Control Outputs need to be open collector or TTL -5 VDC

## Use the 2.5mm cable with stripped and tinned wires for response input

Black/Bare: Gnd  
Red: Nosepoke Response (NO) Active Low when beam is broken  
White: Nosepoke Response (NC) Active Low when beam is released

**NOTE:** + 28 V DC for both the stimulus light and the I/R Photobeam circuit is obtained through the modular cable. Therefore, this cable must be connected even if the cue lights are not being used.

## Stimulus Light Intensity

The thumb wheel potentiometer on the PCB is an overall light intensity control. Rotate to the left for full intensity and rotate to the right for low intensity.

## Function Table for Nosepoke Cue Control (Mode OFF)

Function	ABET Intensity	Generic Output Sequence			Binary Logic Notation (0 = ON, 1 = OFF)		
		Out 1	Out 2	Out 3	Bit 3	Bit 2	Bit 1
Cue Off	OFF	OFF	OFF	OFF	1	1	1
Mode Select On	1	ON	OFF	OFF	1	1	0
High Intensity Yellow	2	OFF	ON	OFF	1	0	1
Low Intensity Yellow	3	ON	ON	OFF	1	0	0
High Intensity Green	4	OFF	OFF	ON	0	1	1
Low Intensity Green	5	ON	OFF	ON	0	1	0
High Intensity Red	6	OFF	ON	ON	0	0	1
Low Intensity Red	7	ON	ON	ON	0	0	0

When using Output 1 (Bit 1) with other outputs it must be turned ON at the same time or immediately after the other output or you will turn the Mode Select ON and the table that follows will determine the state of the output.

## Function Table for Nosepoke Cue Control (Mode ON)

Function	ABET Intensity	Generic Output Sequence			Binary Logic Notation (0 = ON, 1 = OFF)		
		Out 1	Out 2	Out 3	Bit 3	Bit 2	Bit 1
Cue Off	OFF	OFF	OFF	OFF	1	1	1
Mode On	1	ON	OFF	OFF	1	1	0
Ramp Fast @ 10 Hz	2	OFF	ON	OFF	1	0	1
Ramp Medium @ 10 Hz	3	ON	ON	OFF	1	0	0
Ramp Slow @ 1 Hz	4	OFF	OFF	ON	0	1	1
Flicker Fast @ 10 Hz	5	ON	OFF	ON	0	1	0
Flicker Medium @ 5 Hz	6	OFF	ON	ON	0	0	1
Flicker Slow @ 1 Hz	7	ON	ON	ON	0	0	0

All Mode ON functions use the Yellow cuelight. For the Mode ON function to take effect, the second output command must occur between 10-50ms following the Mode ON command or the unit may revert back to Mode OFF functions.

# Terms and Conditions

## Worldwide Headquarters

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## Placing an Order

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

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

## Exchanges and Refunds

No item may be returned without prior authorization from Lafayette Instrument Company and a Return Materials Authorization (RMA#) number which must be affixed to the shipping label of the returned goods. The merchandise should be packed well and insured for the full value. 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 Materials Authorization Number (RMA). When returning instrumentation for service, please contact Lafayette Instrument to receive an RMA number. Your RMA number will be good for 30 days. Address the shipment to:

Lafayette Instrument Company  
RMA# XXXX  
3700 Sagamore Parkway North  
Lafayette, IN 47904, USA.

Shipments cannot be received at the PO Box. All items should be packed well and insured for full value. An estimate of repair will be given prior to completion. We must receive a copy of your purchase order via email before non-warranty repair work can commence.

## 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 contact the Lafayette Instrument Customer Service Department for repair or replacement of the damaged merchandise.

## Limited Warranty

Lafayette Instrument Company warrants equipment to be free of defects in material and workmanship for a period of one year from the date of shipment, except as provided hereinafter. 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. 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.
2. This warranty does not cover damage to components due to improper installation by the customer.
3. Consumable and/or expendable items, including but not limited to electrodes, lights, batteries, fuses, O-rings, gaskets, and tubing, are excluded from warranty.
4. Failure by the customer to perform normal and reasonable maintenance on instruments will void warranty claims.
5. 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.