

PRO-DIAL™ LED DIAL BOARD

INSTALLATION AND OPERATING INSTRUCTIONS

Congratulations on your purchase of the **PRO-DIAL LED** dial board, designed and manufactured with the highest quality standards in the industry by **K&R Performance Engineering**. The new **PRO-DIAL** LED dial board is designed specifically for the harsh environment of drag racing while providing years of great service and convenience. The racer friendly design allows quick and easy adjustments to your “dial-in” at the convenience of being race ready in the car. The **PRO-DIAL** can be controlled by our separate controller or by our new series **PRO-CUBE PLUS** delay boxes which provide instant control to the **LED Dial Board** by means of the “**fiber-link**”. This fiber optic link, impervious to “RF noise”, allows non-interrupted communication signals from the controller to the **LED Dial Board**. Another unique feature is the “**DIMMING**” mode of the **LED Dial Board** that allows full brightness during daytime racing and dims the **LED** display for legible night time viewing when tail light signal is received.

STANDARD FEATURES

CONTROLLER (not required if equipped with new **PRO-CUBE PLUS** delay box)

- **LED Fiber-Optic** technology allows non-interrupted communication to display
- **Small compact size** of controller (allows mounting in tight dash spaces)
- **Large LCD display** with *Blue* LED “back-lighting” allows easy day or night viewing
- **Quick set switches** (for nearly instantaneous changes to “dial-in”)
- **12v and 16v** compatible

LED DIAL BOARD

- **LED Fiber-Optic** technology allows non-interrupted communication from controller
- **Large LED** display
- **Light-weight** yet rugged construction reduces stress on mounting components
- **Highest quality** construction, powder coat, stainless steel fasteners, scratch resistant lens, etc.
- “**Super bright**” **LED’s** for easy day time viewing
- “**DIMMING**” **mode** for easy night time viewing
- **Optional LED colors** available (Red, Blue, Green, White)
- **12v and 16v** compatible

SPECIFICATIONS

Controller (used when not equipped with **PRO-CUBE PLUS** delay box)

Face Dimensions (W x H):	4.1" x 2.2"
Overall Dimensions, included flange (W x H x D):	5.2" x 2.2" x 1.0"
Voltage operating range:	10 – 19.5 Vdc
Operating Current:	0.1 Amps

Dial Board

Face Dimensions (W x H):	8-3/8" x 4-3/4"
Overall Dimensions, included flange (W x H x D):	9-3/16" x 4-3/4" x 1-5/8"
Mounting Hole Dimensions (W x H):	8-3/4" x 3"
Voltage operating range:	10 – 19.5 Vdc
Operating Current:	0.5 Amps (approx. average day-time usage)

CONTENT ITEMS

- “Quick Set” LCD Dial Board Controller (when purchased as a standalone system)
- LED Dial Board display
- “Fiber-Link” fiber-optic cable, 20’
- Dial Board wiring harness with quick connector

Mounting Instructions

1. Mount the Dial Board Controller within easy reach and viewable to the driver. The Controller may be “recess” mounted by means of cutting appropriate sized hole in dash or panel and using threaded spacers (included) for a professional flush mount installation. **NOTE: Controller is NOT required if vehicle is equipped with new *PRO-CUBE PLUS* delay box with built-in fiber optic dial board outputs.**
2. Mount the ***PRO-DIAL LED*** “Dual-Sided” dial board in a location viewable to the race tower by attaching to a dial board bracket (hardware & bracket not included). Screw mount spacing (W x H): 8-3/4” x 3” fits most dial board brackets available. **SPECIAL NOTE: If mounting to a bracket that is attached to a scoop tray, reinforcement of scoop tray is generally recommended. A simple reinforcement plate can be added inside mounting points of scoop tray to prevent fatigue.**

Wiring Instructions

Wire Controller and ***PRO-DIAL*** LED dial board as indicated with power turned “OFF”:

RED -----Ignition switched power (10 amp fuse max.)

BLACK-----Ground

WHITE-----**(controls brightness for night viewing) Must be connected.** Wire to switched Tail Light circuit

“FIBER-LINK”----- Connect one end to controller or ***PRO-CUBE PLUS*** delay box and connect other end to ***PRO-DIAL*** LED dial board

IMPORTANT NOTES:

1. Both Controller and LED Dial Board MUST be connected to the same “switched” power source (turned on at the same time); the “Ignition” switch is recommended. **THIS IS NOT NECESSARY IF *PRO-CUBE PLUS* delay box IS USED.**
2. Fiber-link cable may be cut to length using a sharp razor blade. Insert each end of fiber-optic cable fully into connectors and “snug” locking nut by hand only.
3. “FIBER-LINK” CABLE MUST BE KEPT AWAY FROM EXTREME HEAT AND SHARP EDGES-----DAMAGE TO CABLE AND COMMUNICATION FAILURE FROM CONTROLLER TO LED DISPLAY COULD OCCUR.

OPERATION (when separate controller is used)

The ***PRO-DIAL LED*** dial board is now ready for use. Turn power back “ON” and turn ignition switch “ON” to power both the controller and the LED dial board at the same time. The controller and the LED dial board will both be illuminated and read “7.11” (factory settings). Test the system by changing the “dial-in” using the “ADJ” switches on the controller. Each switch controls each corresponding digit by “toggling” up or down respectively, thus making “dial-in” changes quick and easy. The numbers displayed in the controller are automatically and immediately transmitted to the LED dial board. Note the brightness of the LED dial board, it should be very bright. Turn the tail light on and notice the LED dial board display automatically dims. For day time racing, do **NOT** switch the tail light circuit on. This would make the display dim and hard to read. For night time racing the “***DIM***” mode is activated with the tail light switch, dimming the LED’s for a legible night time display.

OPERATION (with ***PRO-CUBE_{PLUS}*** delay box)

The ***PRO-DIAL LED*** dial board is now ready for use. Turn power back “ON” and turn ignition switch “ON” to power the LED dial board. The LED dial board will be illuminated and read dial-in displayed in the ***PRO-CUBE_{PLUS}*** delay box. Test the system by changing the “dial-in” using the “ADJ” switches on the delay box. Each switch controls each corresponding digit by “toggling” up or down respectively, thus making “dial-in” changes quick and easy. The numbers displayed in the delay box are automatically transmitted to the LED dial board. Note the brightness of the LED dial board, it should be very bright. Turn the tail light on and notice the LED dial board display dims. For day time racing, do **NOT** switch the tail light circuit on. This would make the display dim and hard to read. For night time racing the “***DIM***” mode is activated with the tail light switch, dimming the LED’s for a legible night time display.

Congratulations that’s it! You are now ready to enjoy the convenience and looks that your new ***PRO-DIAL LED*** dial board will provide.

TROUBLE SHOOTING**CONTROLLER SETTINGS FAIL TO TRANSMIT CHANGES TO DIAL BOARD**

Each end of fiber optic cable must be cut squarely with sharp razor blade---do NOT cut with wire cutters. Ensure the Fiber Optic Cable is fully “seated” into receptor and transmitter connectors----Tolerance is very tight and sometimes requires forcing the Fiber Optic Cable into connectors using a pair of “non-serrated” pliers to force the Fiber Optic Cable fully into connectors. The Fiber Optic Cable must be completely “bottomed-out” into connectors on both the Controller and the Dial Board. Engagement depth is approximately 3/4 inch for each end. DO NOT LUBE CABLE, THIS MAY INTERFERE WITH SIGNAL!

TECHNICAL SUPPORT

Contact: ***K+R Performance Engineering, Inc.***
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 Address: 4252 Spring Place Rd SE
 Cleveland, TN 37323

WARRANTY

We at K&R Performance Engineering Inc. warrant to the original purchaser the products manufactured by us to be free from defects in material and workmanship under normal use and service, for which it was intended, but only if it has been properly installed and operated. Our obligation under this warranty shall be limited to the repair of any product or products which may thus prove defective under normal use and service, for which it was intended, within one (1) year from the date of purchase by the original purchaser, and which our examination shall disclose to our satisfaction to be thus defective. Any defect affecting operation of the unit will be repaired at no charge. You will be billed only for shipping. Damage caused by improper mounting or wiring is NOT covered. Modifications or alterations to product(s) would void any and all warranty if determined by K&R that such has affected the product(s) performance and/or durability.

K & R PERFORMANCE ENGINEERING SHALL NOT BE LIABLE FOR INJURY, CONSEQUENTIAL, OR ANY OTHER DAMAGE RESULTING FROM USE OR MISUSE OF THIS PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.

