

## IQEXP-LC INSTALLATION MANUAL



**IMPORTANT:** Carefully read ALL instructions and warnings before attempting to install and operate this equipment.

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## 1. Unpacking & Pre-Installation Check

D&R Electronics Co. recommends that you open and examine all shipments within **48 hours of receipt**. The *INTIMIDATOR IQ* systems are shipped pre-assembled and factory tested. All necessary hardware for standard installation is included. Use this pre-installation check list to verify your unit:

1. Confirm contents with the packing slip

2. Examine unit for damaged in transit (i.e. scratches, broken or bent connectors. etc.).

If any damage has occurred, file a claim **IMMEDIATELY** with the courier stating the extent of damage.

Check **ALL** envelopes, packing slips, shipping labels and tags before removing or destroying them.

## 2. Safety Considerations

The effectiveness of this system is highly dependent upon its proper installation. Please read and follow ALL instructions provided in this manual before attempting the installation.

For proper installation of this product you must have a good understanding of automotive electrical systems and procedures, as well as proficiency in installation and servicing of emergency vehicle sound, lighting and warning equipment. We recommend this equipment be installed only by qualified personnel.

### **WARNING!**

The D&R Electronics INTIMIDATOR siren/light controller is an advanced microprocessor based system. Unlike conventional systems, malfunctions and/or improper operation will result if proper installation procedures are not followed. Refer to any accompanying diagrams and pay particular attention to WARNINGS, CAUTIONS and HAZARDS listed in this document. Follow instructions exactly as shown where so indicated.

### **HEARING HAZARDS!**

Your hearing and that of others, in or near the emergency vehicle could be affected by the very loud emergency sounds generated. **Hearing loss or damage could result due to short-term exposure to excessively loud sounds!** Each jurisdiction (country, province/state, etc.) has specific regulations governing exposure to sound. During installation and testing it is recommended that anyone working in the vicinity of the vehicle to wear approved hearing protection devices.

- DO NOT connect this system to vehicle battery until all other electrical connections have been completed, and have been checked that no short-circuits exist.
- When passing wire through compartment walls and drilling holes is required, the installer **MUST** check both sides of the drilling surface before drilling. Make sure that no vehicle components could be damaged by the drilling operation. Clean the holes and remove any burrs. Use a grommet of appropriate size and sealants when passing the wires through the compartment walls.
- Looms, grommets, cable ties or other installation hardware should be used to anchor and protect wires.
- Splices should be minimized and made in a fashion so as to protect them from corrosion to minimize the possibility of loss of conductivity over time.
- **INSTALLATION OF ALL EQUIPMENT AND WIRING SHALL NOT OBSTRUCT, IMPEDE OR INTERFERE WITH THE DEPLOYMENT OF VEHICLE AIR BAGS, OTHERWISE IT COULD POSSIBLY REDUCE THE EFFECTIVENESS THE AIR BAG SYSTEM CAUSING SERIOUS INJURY (OR EVEN DEATH) IN THE EVENT OF AN ACCIDENT.**
- If using non-D&R Electronics components, such as speaker(s), be sure that they are properly rated for the system you are installing.
- All speakers should be installed in a location that will produce minimum sound levels inside the vehicle, while maximizing the warning signal effectiveness to oncoming traffic on the exterior of the vehicle.
- This device is intended for use by authorized personnel only. The user responsibility is to ensure that all local, state/provincial and federal laws are being complied with. D&R assumes no liability for any loss resulting from the use of this device.

### **3. Specifications**

Weight.....0.84lb / 0.38kg

Physical Dimensions   Height .....1 - 11/16" (43mm)  
                                  Width .....2 - 7/8" (73mm)  
                                  Length .....5 - 15/16" (150mm)

#### *LOW CURRENT EXPANDER (IQEXP-LC) OUTPUTS (OPTIONAL EQUIPMENT)*

##### **CONNECTOR #2**

Pin 1.....OUTPUT #1  
Pin 2.....OUTPUT #2  
Pin 3.....OUTPUT #3  
Pin 4.....OUTPUT #4  
Pin 5.....OUTPUT #5  
Pin 6.....OUTPUT #6  
Pin 7.....OUTPUT #7  
Pin 8.....OUTPUT #8  
Pin 9.....OUTPUT #9  
Pin 10.....OUTPUT #10

### **4. Installation**

#### **CONNECTOR #1**

**PIN 1** — Connect a RED 10 AWG wire to the POSITIVE side of the battery, using a 60A breaker.  
**PIN 2** — Connect a BLACK 10 AWG wire to battery GROUND.

#### **CONNECTOR #2**

**PIN 1** — OUTPUT 1, 2A MAX  
**PIN 2** — OUTPUT 2, 2A MAX  
**PIN 3** — OUTPUT 3, 2A MAX  
**PIN 4** — OUTPUT 4, 2A MAX  
**PIN 5** — OUTPUT 5, 2A MAX  
**PIN 6** — OUTPUT 6, 2A MAX  
**PIN 7** — OUTPUT 7, 2A MAX  
**PIN 8** — OUTPUT 8, 2A MAX  
**PIN 9** — OUTPUT 9, 2A MAX  
**PIN 10** — OUTPUT 10, 2A MAX

**CONNECTOR #3** - expander control cable from IQ control box

**NOTE:** - For setup changes refer to the software manual for programming.

## 5. IMAGES

### IQEXP-LC REAR VIEW

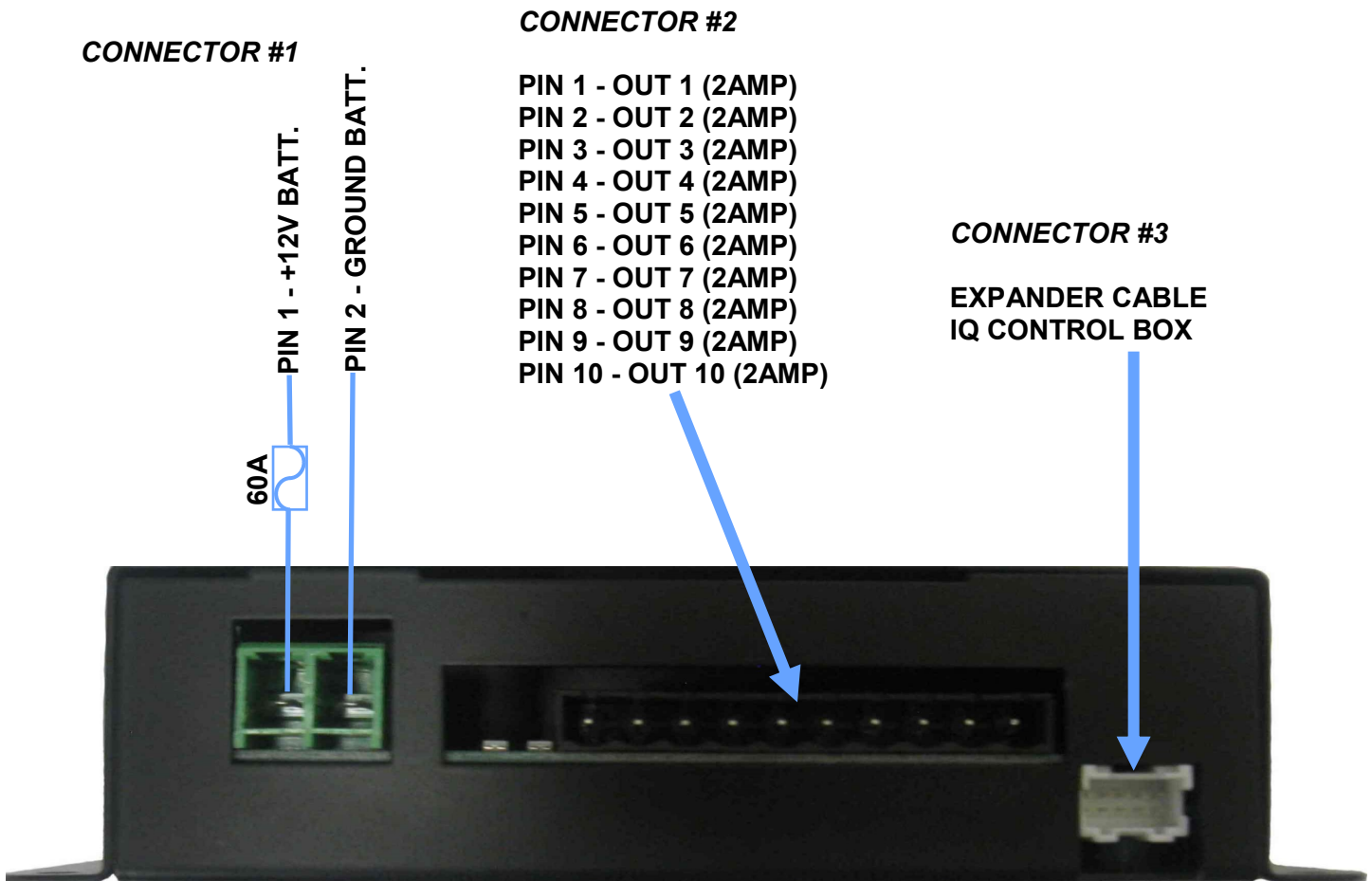


Figure 1: Input / Output Layout

### IQEXP- LC TOP VIEW

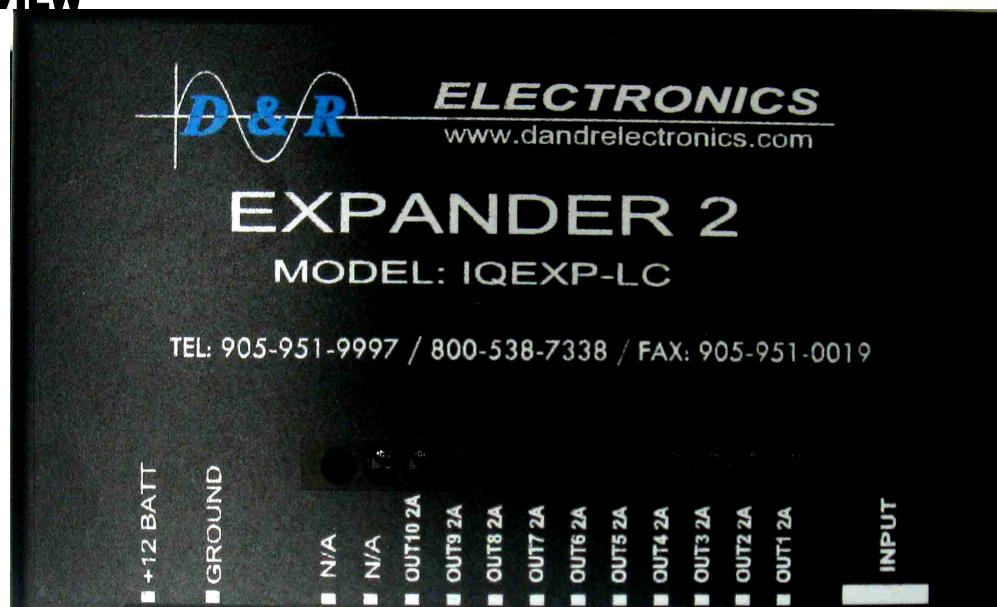


Figure 2: IQEXP-LC  
Output LED Indicators

## WARRANTY

D & R Electronics warrants its new products to be free from defects in material and workmanship, under normal use and service for a period of three years on parts replacement.

This warranty applies only to original purchasers acquiring the product directly from D&R Electronics, or its authorized dealers. Warranty will not be recognized without proof of purchase or bill of sale.

This warranty is not transferable.

The warranty begins on the date of delivery to the first user/purchaser.

This warranty shall not apply to products which must be repaired due to normal wear and tear, negligence, improper installation, abuse, misuse, or which have been altered or modified at a facility other than D & R Electronics, or its authorized depot centers.

Units proved to be defective within the warranty period, based on an examination by D&R Electronics, will be replaced or repaired at D & R Electronics' option. This warranty does not cover travel expenses or labor charges for removal or installation.

Lamps, flash tubes, batteries or other items considered consumables are not covered under warranty.

This warranty is in lieu of all other express warranties. D&R Electronics makes no warranties, expressed or implied, other than the express warranties contained herein.

## PRODUCT RETURN POLICY

In order to provide you with faster service, product returns for repair or replacement, must have a **Return Goods Authorization Number (RGA number)**. Please contact our company to obtain a RGA number before you return the product to D & R ELECTRONICS. Write the RGA number clearly on the exterior of the package. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

D & R ELECTRONICS assumes no responsibility or liability for expenses incurred for the removal and/or the installation of products requiring service and/or repair. Repairing or replacing product is at the discretion of D & R ELECTRONICS.

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