# Precision Loads™ **Technical Bulletin**

PL9710 Indicators with PL9774 Limit Setpoint Option

For Model PL9710 Indicators used with a Model PL9774 Limit Setpoint module, the following instructions apply.

NOTE: For dual limit setpoint applications, Model PL9710 indicators must be ordered with the dual limit setpoint option software installed. Standard PL9710 indicators will not contain this option software, it must be added by Rice Lake Weighing Systems.

# **System Configurations**

The PL9774 Limit Setpoint option may be used with single channel on-board scale system configurations (3, 4, 5 or 6-point load cell kits) connected to indicator channel one (CH-1). Also tractor/trailer scale systems using PL9710 indicator set for dual channel operation



(CH-1, CH-2, TOTAL) may also be configured with the PL9774 Limit Setpoint option. However, limits are only operable in the Total Gross weight mode. Limit Setpoint control for each individual channel of a dual channel indicator is available by special order only.

### **Limit Module Connections**

Model PL9774 Limit Setpoint Module is typically supplied with an 8 ft (2.43 m) lead for inter connection to the PL9710 indicator, and a 15 ft (4.57 m) lead for inter connection to lights/alarms and light/alarm power source. See Figure 1 for help wiring your particular application.

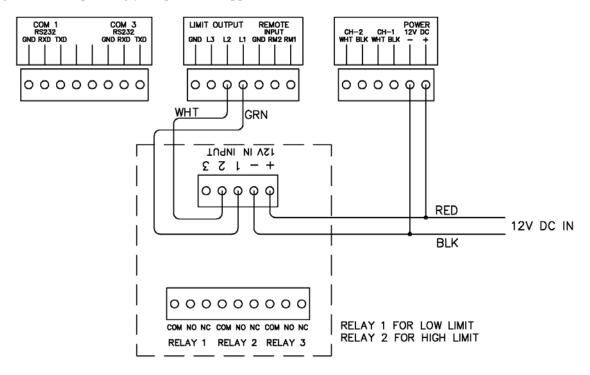


Figure 1. Relay Box Wiring Diagram



The 8 ft lead to the indicator has four conductors. The Black and Red conductors may be wired to the GND and +12Vdc terminals as shown on the rear terminal strip of the PL9710. The Green conductor connects to terminal L1 (Limit 1) and the White conductor connects to terminal L2 (Limit 2) on the rear strip of the PL9710. The 15 ft Red (Power) lead of the PL9774 is wired to the positive power source of the lights or alarms being used, with light/alarm ground wired to the negative power source terminal. Green (L1) and White (L2) conductors are wired to the positive terminals of the light or alarm as shown in Figure 2.

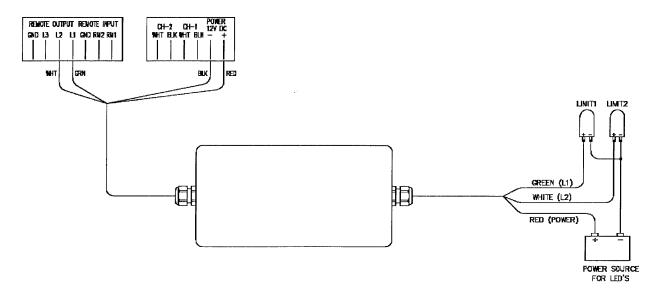
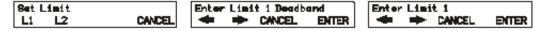


Figure 2. Digital Output Drawing

## **Program Setup**

To set limits and limit deadband,

1. Press the *Menu* key for 5 seconds to enter the *Setup* mode.



- 2. Advance to **Set Limit 1** by pressing the **Up Arrow** key on the upper right area of the PL9710.
- 3. Enter the value desired for Limit 1.
- 4. After entering the screen will ask you to enter a Limit 1 deadband. The factory default setting is +/- 500 for the deadband.
- 5. Change the deadband if desired, otherwise press Cancel and forward to Set Limit 2.
- 6. Enter the value desired for Limit 2, followed by either change to or **Cancel** of the desired deadband for Limit 2.
- 7. Exit the **Setup** mode.

### Operation

Verify Limit 1 and Limit 2 setpoint operation. If using lights, Limit 1 will activate once the setpoint threshold is reached. Limit 1 will deactivate when Limit 2 is reached. Either flashing or continuous lights or LED's may be used.

## **Specifications**

Relay Rating: 250 Vac/Vdc, 5 amp

Module Size: 3"W x 7"L x 2"H (76 mm x 178 mm x 51 mm) NOTE: For in-cab mounting only.

Deadband: A relay trips when the display is equal to or greater than the limit. The relay will be untripped if the display

drops to a value that is less than the limit minus that deadband value.

NOTE: Module is for in-cab mounting only. Module not to be installed externally unless housed inside a weatherproof enclosure.

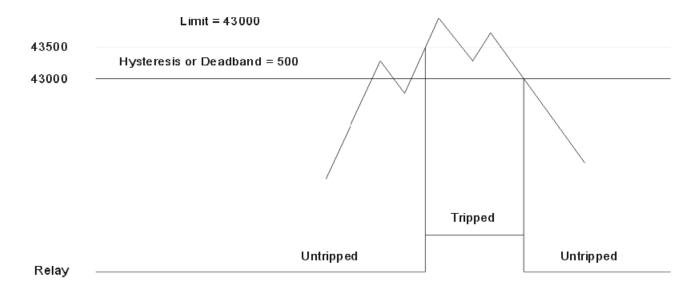


Figure 3. Typical Relay Limit Operation