



SOLAR TRAFFIC CONTROLS

“Wireless” Traffic Control Solutions

Warehouse / Industrial Traffic Controller

Model 80ITSWHTC-SO60204

Dual-Single Lane Scale Control

Rev. 1.0, 12/01/06, Software: WHTC-SO60204

General

Industrial traffic controls can also encompass truck scale control at busy facilities. Rather than have personnel standing in the areas directing traffic an STC industrial traffic control package can be employed. This version of the system is designed to increase safety for users in truck scales where basic traffic control is required for access to the scale and for release with weight documentation.

The system consists of 4 sets of IR beam break detectors, the control unit, 2 red/green and 2 red/yellow/green traffic indicators located on each scale. Figure 1 shows a diagram of the system set up with both lanes, all of the sensors and the lamps shown.

Theory of Operation

This discussion will focus on Lane 1 and will also apply to Lane 2.

- Each lane will operate independently of each other. For example, one may be in use while the other is off.
- Operator has an ENABLE button for each lane to control operation. When the system is in standby the lamps will be in the all red mode.
- Pressing the ENABLE button once will cause the lamps on the lane 1 to show a solid green on both L1 and L2 if both S1 and S2 sensor sets are showing a clear path between the transmitters and the detectors. If there is an obstruction, the operator will hit the RELEASE button causing L2 to change as if running an exit sequence for the light. If the obstruction remains, the lamp will return to red within 15-30 seconds indicating that a ‘parked’ obstacle exists on the scale. This value will be user adjustable on the LCD screen.
- Assuming that L1 and L2 are both green consider a truck moving into Lane 1. When the path from S11 to S12 is blocked for more than 1-5 seconds (field programmable) L1 will go red and L2 will go yellow. This value is field adjustable on the LCD screen.

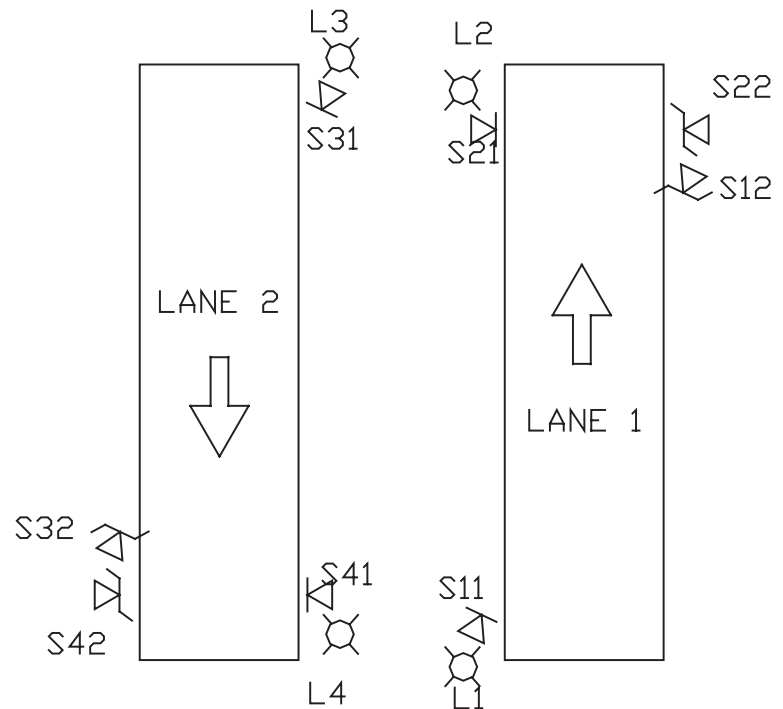


Figure 1: Typical layout for a dual-single lane scale control system

- When the truck blocks S21 to S22, the L2 will go solid red and the system will be latched in red.
- After weighing the truck, the operator presses the RELEASE button changing L2 to green to allow the truck to exit Lane 1.
- The truck then pulls forward clearing sensor path S11 to S12. When this path is clear and the path between S21 and S22 is clear, L2 will turn red. Both L1 and L2 will remain in solid red, standby mode, until the ENABLE button is pressed again to run the cycle.
- In the event that there is a false triggering of the system the user can reset it by holding down the ENABLE button for 5 seconds. Both L1 and L2 will revert to the standby mode of red. Since the user will may not be able to clearly see the status of the lamps from the control point, indicator lamps for L1 - L4 are provided on the face of the controller.

The controller is housed in a NEMA 3R wall mount enclosure. The unit requires a nominal 115VAC power supply for normal operation and includes a master AC power switch on the face of the unit.

In addition the system is equipped with a remote control unit for operating the lights. The remote unit features the ENABLE/RELEASE for Lane 1 and Lane 2. Connection to the master control is made via a keyed connector with a 7-foot cord.

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