Loop Sensors

095150 – Loop Sensor Box,Up to 6 Loops

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Control Voltage	24VDC				
Approx. Dimensions	12.5"W x 11"H x 6.375"D				
Loop Frequency - Two Position DIP Switch	***SWITCH***	***LOW***	***MEDIUM - LOW***	***MEDIUM - HIGH***	***HIGH***
	1	ON	OFF	ON	OFF
	2	ON	ON	OFF	OFF

General Info

The purpose of this manual is to provide the necessary information to install and operate the Hydro-Chem equipment to exceed your defined expectation.

The Loop Sensor Box will come assembled and ready for wiring. In-ground loops will need to be installed prior to wiring, per the project MEP. Wiring specs may be found within the document holder of the MCP.

System Overview

Figure 1 outlines the overall layout of the Loop Sensor Box.

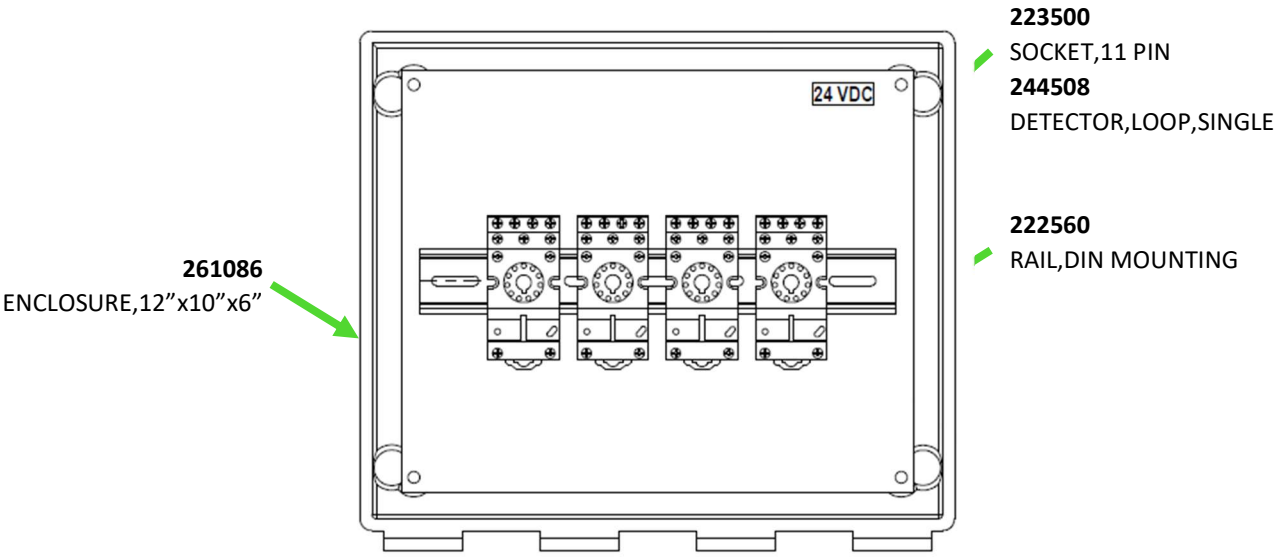

Figure 1. Loop Sensor Box Assembly Layout

Installation & Set-Up

The enclosure of this assembly is to be mounted to the wall per the project MEP. The wiring instructions are found within the Electrical Packet for the system. Once the loops of the Automated System are cut in and installed, the wiring for this enclosure may be completed.

When starting-up the system, the loops should be set-up so that the frequencies of loops differ as you travel through the wash bay (example: Low, Medium-High, High, Medium-Low, Low, etc.). These are set using the 2-Pin 2-position DIP switches.

Troubleshooting

Issue	Potential Solution		
The wash isn't activating or certain portions of the wash aren't starting	Is each loop showing a value on the LED indicator when it should?		
	Yes - Ensure that the MCP is receiving a signal from the loop sensor (Monitor Systems or input lights on the PLC). If so, check the actual output.		
	No - Check that there no loop fault. If there is a fault, trace the cause. If not, check that the loop detector is fully seated on the socket and that all wires are fully connected in the relay socket (See Table 1. Loop Sensor Pin Layout below)		
	Sequence	**Fault**	**Display**
	1 Flash	Open Circuit Loop	F1
	2 Flashes	Shorted Circuit Loop	F2
	3 Flashes	25% excessive change in inductance	F3

Table 1. Loop Sensor Pin Layout

Pin	Function
1	**Power, Hot (+)**
2	**Power, Neutral (-)**
3	No Connection
4	No Connection
5	**Output Relay, Common**
6	**Output Relay, Normally Open (Closes on DETECT)**
7	**Loop Input**
8	**Loop Input**
9	No Connection
10	Output Relay, Normally Closed (Opens on DETECT)
11	No Connection