



## Monitoring Safety Status Through Modbus with the Horner X10





Demo station for Inxpect project



## Inxpect Demo Project, Pewaukee, Wisconsin

### BACKGROUND

For over 60 years, Power/mation has built relationships with manufacturers and end users alike to creatively solve automation challenges through technology and education. Our longstanding relationships with our Industrial Channel Partners enables us to push the boundaries of industrial automation technologies and to bring innovative solutions backed by exceptional customer service to all seven of the states that we cover. It is the goal of our organization to maintain an entrepreneurial spirit while providing product expertise, in partnership with established brands and emerging companies with exciting new technologies.

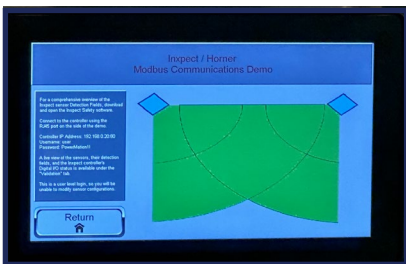
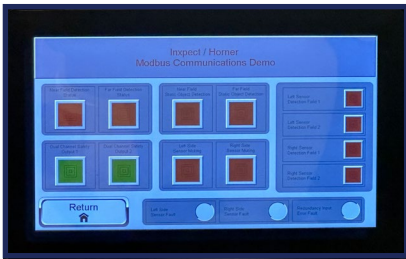
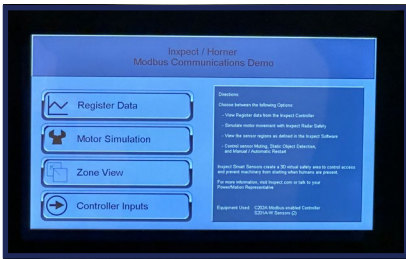
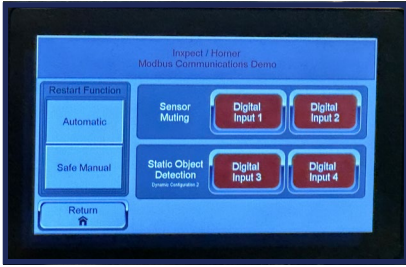
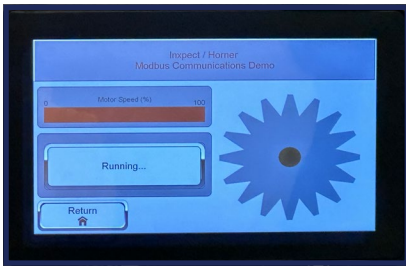
Horner has been a longstanding partner of Power/Mation and many P/M sales representatives have attended the OCS Factory trainings and Advanced trainings hosted by Horner. Power/Mation Business Development Managers are also proud to have collaborated on Horner application videos in the past, alongside Chuck Ridgeway, to showcase how well Horner PLC/HMI's can integrate with our other supported product lines.

### CHALLENGE/OPPORTUNITY

The company Inxpect designs and manufactures a Radar Based Safety System. This is a 3rd party (TUV) certified safety product specifically developed to monitor and protect personnel from injuries related to hazardous machine motion. Because it utilizes radar-based technology, it is highly immune to manufacturing byproducts that severely challenge optical based safety systems. This makes it a great solution to be used in dirty environments such as foundries and paper converting processes, but can also be useful for a wide variety of industries and applications where protection of personnel or equipment is required.

Power/Mation created a demo that showcases the ability of the Horner X10 and the Inxpect controller to communicate over Modbus. While this demo is intended for internal use, it highlights the ease with which a customer can use a Horner PLC alongside an Inxpect safety system in order to monitor the status of sensors, troubleshoot the system, and provide operators with more detailed information and feedback over a means of non-safety communication. All while reserving the safety outputs on the Inxpect controller to be able to collaborate with safety-rated products.





Screenshots from the X10 display

## SOLUTION

Power/Mation's Pewaukee office features an ever-evolving fencing demo, which highlights the capabilities of their Solutions Group, fencing department, safety product lines, and key vendors. Recently, Power/Mation's Safety Business Development Manager (BDM), Jeff Johnson, and Technical Sales Associate, Adam Bohn, worked to expand this showcase. In order to feature the protocol communications of the C202A Controllers by Inxpect, Jeff and Adam chose a Horner Micro X10 because of its large screen, small package, onboard I/O, and simplicity of Modbus TCP communication.

In this Demo, the Inxpect controller acts as the Modbus TCP protocol server, and it was easy to configure the LAN port on the X10 to act as the Modbus Client. This allowed them to use the X10 to monitor the status of the Inxpect sensors and controller without utilizing the safety outputs from the controller. It also allowed them to display much more information on the X10's built-in HMI than they could have conveyed over the 4 safety outputs from the Inxpect controller. The built-in I/O on the X10 also allowed them to use non-safety outputs in order to control a Banner WLS28 Pro Series (Programmable) LED Strip Light to further indicate status to an operator.

## TESTIMONIAL

"Horner's product portfolio and exceptional technical support allows for ease of integration with other products and technologies carried by Power/Mation. Horner's exceptional customer service and commitment to collaborating with Power/Mation's salesforce in order to aid our customers, reassured us that their applications team would be fully capable and happy to assist us with any issues that we encountered while developing this demo."

~ Adam Bohn, Power/Mation, Pewaukee, WI

