BRIEF DESCRIPTION

[0003] Certain embodiments commensurate in scope with the originally claimed invention are summarized below. These embodiments are intended only to provide a brief summary of possible forms of the invention. Indeed, the invention may encompass a variety of forms that may be similar to or different from the embodiments set forth below.

[0004] In one embodiment, there is provided a system comprising a display device. The display device includes a first communication interface port, a second communication interface port, and an interface switch. The first communication interface port is configured to communicatively couple with an automation controller, the second communication interface port is configured to accept input from an external electronic device. The second communication port is located on a front panel of the display device. T~~, and the~~ interface switch is configured to~~capable of~~ detect~~ing~~ a physical coupling with the second communication interface port or communication traffic from the second communication interface port and switch~~ing~~ the display device between at least two modes including a first mode that performs display functionality and a second mode that performs ~~second~~ communication interface port adapter functionality. The communication interface port adapter functionality enables the external electronic device to communicate with the automation controller without having to open an enclosure housing of the automation controller.

[0005] In another embodiment, there is provided a system comprising a display device. The display device is communicatively coupled to an automation controller via a serial interface on each of the display device and the automation controller. The display device includes a port located on a front panel of the display device, and an interface switch. The interface switch is configured to~~capable of~~ detect~~ing~~ input and enable~~enabling~~ the display device to perform display functionality or to perform adapter functionality, based upon whether a connection at the port is detected and whether communication traffic from the port is detected. The adapter functionality enables an external device connected to the port to communicate with the automation controller without having to open an enclosure housing of the automation controller.

[0006] In yet another embodiment, a method includes receiving input at an interface switch within a display device, where the interface switch is electrically coupled to a serial interface port and a programming port and the display device is connected to an automation controller. The programming port is located on a front panel of the display device. The method also includes detecting, via the interface switch, a connection and communication traffic from the programming port based on the input.

The method also includes performing, via the display device, adapter functionality if both the connection and the communication traffic are detected at the interface switch, and performing, via the display device, display functionality if neither the connection nor the communication traffic are detected at the interface switch, or if only one of the connection or the communication traffic is detected at the interface switch. The adapter functionality enables an external device connected to the programming port to communicate with the automation controller without having to open an enclosure housing of the automation controller.

DRAWINGS

[0007] These and other features, aspects, and advantages of the present invention will become better understood when the following detailed description is read with reference to the accompanying drawings in which like characters represent like parts throughout the drawings, wherein:

[0008] FIG. 1 illustrates an embodiment of an industrial automation and control system in accordance with aspects of the present techniques;

[0009] FIG. 2 illustrates an embodiment of an industrial automation and control system including a display device installed in an enclosure's door in accordance with aspects of the present techniques;

[0010] FIG. 3 illustrates an embodiment of an industrial automation and control system including a display device installed in an enclosure's door with a personal computer (PC) connected to a universal serial bus (USB) port installed in the display device in accordance with aspects of the present techniques;

[0011] FIG. 4 illustrates an embodiment of a display device in accordance with aspects of the present techniques;

[0012] FIG. 5 is a component diagram of a display device and an interface switch connected to a personal computer (PC) and an automation controller in accordance with aspects of the present techniques;