CLAIMS:

1. A system, comprising:

a display device comprising a first communication interface port, a second communication interface port, and an interface switch, wherein:

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; ~~and~~

the interface switch is configured to detect a physical coupling with the second communication interface port or communication traffic from the second communication interface port and switch 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; and

wherein the second communication interface port adapter functionality enables the external electronic device to access and configure the automation controller.

2. The system of claim 1, wherein the interface switch is configured to switch the device from the first mode to the second mode when the physical coupling with the second communication port is detected and the communication traffic from the second communication interface port is detected.

3. The system of claim 1 or 2, comprising the automation controller comprising a single controller communication interface port and the first communication interface port communicatively coupled with the single controller communication interface port.

~~4. The system of any one of claims 1 to 3, wherein the second communication interface port adapter functionality enables the external electronic device to access and configure the automation controller.~~

54. The system of any one of claims 1 to 43, wherein the display device is installed locally in an enclosure housing the automation controller.

65. The system of any one of claims 1 to 54, wherein the second communication port comprises a universal serial bus (USB) port.

76. The system of claim 32, wherein the first communication interface port and the single controller communication interface port comprise serial interface ports.

87. The system of any one of claims 1 to 76, wherein the external electronic device is a personal computer (PC).

98. The system of any one of claims 1 to 87, wherein the automation controller comprises a programmable logic controller (PLC).

109. A system, comprising:

a display device communicatively coupled to an automation controller via a serial interface on each of the display device and the automation controller, wherein the display device comprises:

a port located on a front panel of the display device; and

an interface switch, wherein the interface switch is configured to detect input and enable 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; and

wherein the adapter functionality enables an external device connected to the port to access and configure the automation controller.

1110. The system of claim 109, wherein the interface switch comprises detection logic comprising firmware that detects the connection and the communication traffic.

~~12~~11. The system of claim ~~10~~ 9 or ~~11~~10, wherein the interface switch performs the adapter functionality if both the connection at the port is detected and communication traffic from the port is detected.

~~13~~12. The system of any one of claims ~~10~~ 9 to ~~12~~11, wherein the automation controller comprises a single serial interface, which is utilized to connect to the display device.

~~14~~13. The system of claim ~~10~~ 9 or ~~11~~10, wherein the interface switch performs the display functionality when neither the connection nor the communication traffic are detected, or if only one of the connection or the communication traffic is detected.

~~15. The system of any one of claims 10 to 14, wherein the adapter functionality enables an external device connected to the port to access and configure the automation controller.~~

~~16~~14. A method, comprising:

receiving input at an interface switch within a display device, wherein 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;

detecting, via the interface switch, a connection and communication traffic from the programming port based on the input;

performing, via the display device, adapter functionality if both the connection and the communication traffic are detected at the interface switch, the adapter functionality enabling an external device connected to the programming port to access and configure the automation controller; 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.

~~17~~15. The method of claim ~~16~~14, wherein the display device and the automation controller are connected via the serial interface port on the display device and a single communication port on the automation controller.

~~18~~16. The method of claim ~~17~~15, wherein the single communication port is a serial interface type port.

~~19~~17. The method of any one of claims ~~16~~-14 to ~~18~~16, wherein the programming port is located on a front panel of the display device.

~~20~~18. The method of any one of claims ~~16~~-14 to ~~19~~17, wherein the interface switch is configured so that the display device performs display functionality by default.

~~21~~19. The method of any one of claims ~~16~~-14 to ~~20~~18, wherein performing adapter functionality comprises forming a communicative link between adapter functionality circuitry and the interface switch and cutting off a separate communicative link between display functionality circuitry and the interface switch.

~~22~~20. The method of any one of claims ~~16~~-14 to ~~20~~18, wherein performing display functionality comprises forming a communicative link between display functionality circuitry and the interface switch and cutting off a separate communicative link between adapter functionality circuitry and the interface switch.