



South Western Communications, Inc.

Detention Electronics Group

PLC Service Bulletin November 2011

The PLC (programmable logic controller) is the heart of Detention Electronics System. The computer or control panel at the operator station is a user interface only and involves some level of programming, but the PLC makes most of the decisions and does the bulk of the work, providing the inputs and outputs that operate the relays for door and intercom operation. It communicates over data lines to other equipment, including the operator stations.

The PLC is located with the door controls and is capable of communicating with intercom systems, camera systems, lighting controls and more. It has a power supply, CPU with programming specific to the facility, input and output modules that operate the doors, and data communication ports that talk to other devices. The photo below is a simple PLC hardware grouping. From right to left are the power supply, CPU, remote device control, blank expansion slots, output module and input module. These input and output modules are capable of 96 points each. An input could be a door status monitor or duress alarm switch. An output may be a door control relay or intercom activate relay. Inputs and outputs are wired directly through the connectors on the front of the modules. Communication with the operator station is done via data cable on the CPU. Power should be removed before disconnecting any of these modules from the black backplane. A solid red error indicator on any module is a likely clue as to why the system has failed.



Prior bulletins on various subjects may be reviewed at <http://www.swcdec.com/Bulletins.htm>

For parts, support, or to schedule a service visit contact us at ServiceDecatur@swc.net or visit us at www.swcdec.com

1608 CHURCH STREET SE * DECATUR, AL 35601

(256)351-2445 * FAX (256)351-1648

CORPORATE HEADQUARTERS – EVANSVILLE, IN
MAJOR BRANCH LOCATIONS – DECATUR, AL * EVANSVILLE, IN * INDIANAPOLIS, IN * NASHVILLE, TN