

UL Listed

**Detention Logic Controls
4100/4120 Series Operator Panels,
Annunciator Panels, and Control Panels****STANDARD FEATURES:**

- Field Programmable I/O Logic
- 500 Point I/O Capacity per Controller
- 1000 Annunciation Points per Controller
- RS232 Outputs
- Supervised Serial Graphic I/O Interface
- Control Circuits with Status Feedback
- Supervised Input/Output Points
- Battery Standby
- Battery Supervision (Low/Missing Battery)
- UL Listed Fire Alarm Interface

SOFTWARE FEATURES:

- Field Programmable
- Full Logic Capabilities (And, Or, Not, Timing, Count, etc.)
- On-Board Trouble Diagnostics
- CCTV Call-up
- Direct Select Intercom/Paging
- Four Operator Access Levels

OPTIONAL FEATURES:

- PC Based Color Graphics Operator Panels
- PC Based History Logging Terminals
- Customized Graphic Faceplates
- Customized I/O Interface Panels
- Optional 19" Rack Mounting

DESCRIPTION:

Control equipment for Detention applications must be designed to satisfy stringent performance standards and must offer the flexibility of on-site programming, powerful yet easy-to-use operator interfaces, and communication to multiple control panel and status annunciator locations.

**SIMPLEX CONTROLS PROVIDE CUSTOM SOLUTIONS FOR DETENTION FACILITIES**

Additionally, when the location requirements include multiple building sites, large areas, or other extensive demand for coordinated control, the equipment must be able to be networked to provide proper system status monitoring and control.

The Simplex 4100 and 4120 series of Detention control products satisfy these requirements from smaller, single control cabinet locations, up to extremely large networked systems. Operator panels are available in a wide variety of styles including: graphic faceplates, wall mounted LCD readouts and switches, and high resolution desk top touchscreen monitors.

Simplex detention control systems can be custom programmed to meet a wide variety of applications. Using a laptop computer and Simplex service software, their software design is configurable, programmable, and editable on-site, often minimizing delays in job completion due to last-minute changes.

Each controller can be easily expanded up to a maximum of 500 supervised inputs and/or supervised outputs. A typical I/O point may be a door position switch or control for door lock/unlock, intercom station, camera control, or privilege control such as lights and/or telephone.

OPERATOR INTERACTION:

4100 series Detention Logic Controls interface with a wide variety of faceplates and operator panels. Through operation of faceplate switches, the Logic Controller can annunciate and control cell doors, sallyports, interlock group functions, lighting, receptacles, CCTV, inmate telephones, and other required operational functions.

Controlled device status indications are fed back to the control panel via constantly supervised

monitoring circuits and displayed on the faceplate via LED or incandescent indicators. Both the wiring to these indicators and the indicators themselves are supervised. This supervision allows the use of a single light to indicate the secured or unsecured status of a door, eliminating the confusion associated with having to differentiate between different colored lights on a high density faceplate.

MODULE DESCRIPTIONS:

Master Controller Module (4100/4120-7000 Series):

The Master Controller module provides system control, synchronization, and module supervision, scanning each module for status changes. Features include:

- Maintenance Interface Panel with Passcode Access
- Five Individually Programmable Control Keys
- 80 Character LCD Status Display
- Event History Log
- Acknowledge Switches
- System Status LEDs
- Manual Control of System Points
- Time-Based Control Functions
- Field Programmable
- English Language Maintenance Reminders

Battery Charger (Standard):

- Recharges 50 Ah Batteries to 70% of Rated Charge in 12 Hours
- Compatible with Lead Acid or NiCad Batteries

Power Supply (Basic):

- 120 VAC Input
- Provides 8 A @ 28 VDC for System Operation (two taps of 4 A each, 24 VDC During Battery Back-Up)
- Power Limited Design to UL Standard 864

Remote Unit Interface (RUI) (4100/4120-0303):

- Provides a Supervised Serial (2-wire) Communications Channel to Remotely Located Faceplates and I/O Panels
- Fault tolerant communications channel (operates with a single ground, wire-to-wire short, or open)
- Mounts Internally in Control Panel

LED/Switch Faceplate Controller Modules (4100/4120-7400 Series):

- Allows Control Panel to Interface to up to 64 LEDs and 64 Switches, in Increments of 32
- Communicates using one Supervised 2-wire Circuit
- Monitors Switches for Status Changes
- Supervises and Controls LEDs
- Supervises LED/Switch Module Placement
- Pluggable Terminal Block Connections and Quick Connect Ribbon Cable Terminals for Easy Installation and Service
- Plate Mountable Within Faceplate Console
- Built-In Tone-Alert Confirms Switch Activation to Operator
- LED Flash Rate is Individually Programmable as Slow, Fast, or Steady
- Monitors Momentary or Maintained switches

24 Point I/O Interface (4100/4120-0302, 4100-7401):

- Allows Control Panel to Interface to up to 24 Inputs or Outputs
- Communicates using one Supervised 2-wire Circuit
- Each Point is Individually Configurable as an Input or Output for Supervised Monitoring of Normally Open (NO), Normally Closed (NC), Current Limited, or Shorting Contacts
- Supervises and Monitors Roller Bolt, Latch, and Door Position
- Provides control signals to relays for door control, intercom, CCTV callup, etc..
- Provides Supervised Outputs rated at 150 mA, @ 24 VDC
- Mounts in Relay Interface Cabinets (RIC)