

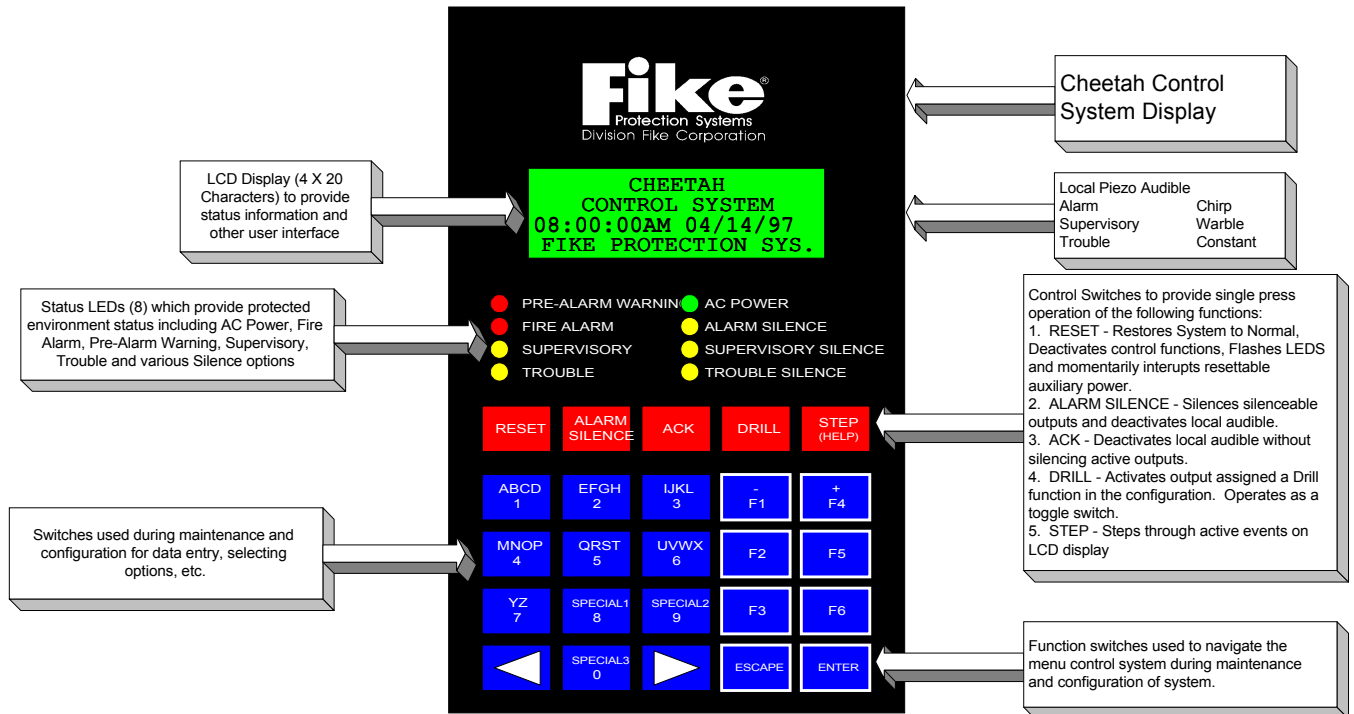
CHAPTER 2

2.1 FUNCTIONAL DESCRIPTION

The Cheetah Control System consists of a Cheetah System Controller, a power supply and an enclosure. The controller provides two signalling line circuits capable of supporting 127 intelligent devices, two notification appliance circuits and three dedicated relays for alarm, trouble and supervisory notification. The controller also provides an 80 character display and user interface to operate and configure the system. The power supply provides 5.0 amps of usable power with either 120 VAC or 208/240 VAC incoming AC power. The power supply is also capable of charging up to 65 AH batteries. Optional modules can be added to increase intelligent device capacity to 508 total, increase total power supply to 10.0 A total and optional eight programmable relays.

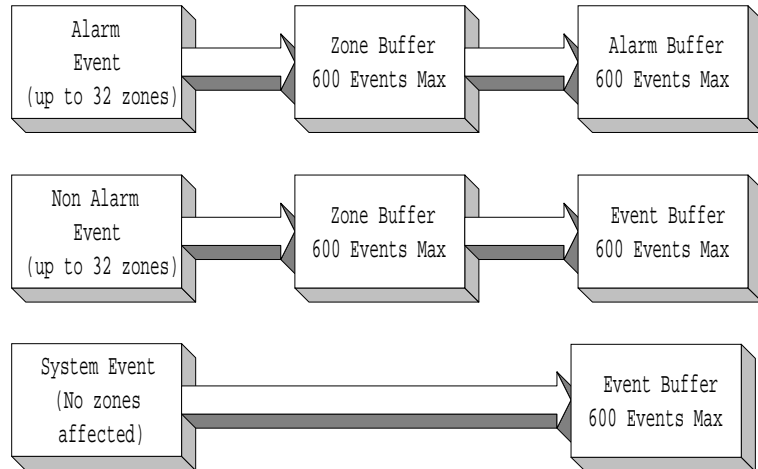
2.2 SYSTEM FEATURES

2.2.1 User Interface



2.2.2 History Buffer

The Cheetah Control System maintains three distinct history buffers plus a current event list to segregate the events for easy viewing and interpretation of the system status. Each event can be broken into three categories: Alarms, Non-Alarms and System Events. An alarm event is recorded in the Zone Buffer for all assigned zone and the Alarm buffer. A non-alarm event, such as a trouble or supervisory, is recorded in the Zone Buffer for all assigned zones and the Event buffer. System events like Reset, Disable and Configuration changes are stored in the event buffer only.



2.2.3 Password Control

The Cheetah Control System uses password levels to control access to various programming options to prevent accidental or unauthorized modification of important system operating parameters or the user defined configuration. Four levels of access with up to 16 users per access level are used in the Cheetah Control System:

Basic Operations (Level 1) – Allows access to Control Switches (Reset, Alarm Silence, Ack, Drill and Step), Display History, View Device operating parameters and Change Time/Date.

Enable/Disable Functions (Level 2) – Allows user to manually disable and enable devices, circuits or zones, and Change Device Sensitivity.

System Configuration (Level 3) – Allows user to change the system configuration.

System Administrator (Level 4) – Allows editing of passwords and special functions.

The lock on the enclosure controls access to Basic Operations (Level 1). Once the door is open, all Basic Operation functions are available. All other access levels require a password, which is entered on the Cheetah Control System. Up to 16 different passwords can be assigned to levels 2 & 3 to further define the individuals accessing the system. If all the passwords are forgotten or lost, contact Fike Protection Systems to access the menu system.

2.2.4 Menu System

All system functions and configuration can be accomplished from the display unit with use of a personal computer by a Menu Control System. The Menu Control System is segregated into 6 basic categories. Each category is briefly described below:

History – Allows viewing and erasing the various history buffers available with the Cheetah Control System.

Password - Used to enter a password to obtain access to additional functions.

Special – Access to system diagnostics, Walk test function, Set Time/Date, Current device operating parameters and sensor sensitivity adjustment.

Enable / Disable – Access to enabling and disable function for devices, circuits and zones.

Configuration – Access to custom system configuration.

2.2.5 System Operational Features

Pre-Alarm Warning for Sensors – Two levels of adjustable pre-alarm levels with programmable outputs to provide early warning of potential emergency conditions.

Automatic Day/Night Sensitivity Adjustment – Up to 16 time zones for automatic sensitivity changes based upon the time and day. Includes a Holiday schedule to adjust for Holidays.

Automatic Sensor Sensitivity Setting to meet NFPA 72 detector testing requirements

Various detection types -

- Alarm only zones with or without alarm verification delay
- Counting Zone Release: any two addresses will release zone
- Cross Zone Release: an odd and even address is required to release zone
- Single Sensor Release

Abort Types - Six different abort types to meet a wide range of applications. Abort types are selected by zone allowing multiple abort types on a single system.

Custom Message (20 Characters) for each device

Flexible control function programming – Allows control function programming using prioritization, AND/OR functions, multi-zoning, and various modulating output selections.

Drift Compensation for Analog Sensors – The system can automatically compensate for changes in the environment including accumulation of dust on the sensor and changes in the protected environment.

Walk Test – Allows functional testing of the system without requiring an operator at the control panel. Optional Notification Appliance testing option allow functional testing of custom configuration.

System Learn Mode – The system can automatically configure devices on the Signaling Line Circuits, requiring less programming time than traditional analog systems.

2.2.6 Power Supply

Integral 24VDC nominal power supply provides 5.0A in alarm, 1.0A in quiescent.

Selectable 120VAC, 208VAC or 240VAC incoming AC power at 50 or 60 hertz.

Resettable or continuous auxiliary power

Capable of charging up to 65AH batteries.

Additional Supplemental Power Supply doubles power (alarm and quiescent) and battery charging capacity.

2.2.7 Notification Appliance Circuits

Each Cheetah Control System has two integrated notification appliance circuits on board.

Each circuit is rated for 2.0 amps @ 24 VDC and is power limited. Each circuit is individually configured and can be assigned to up to 240 zones.

2.2.8 Relay Outputs

Each Cheetah Control System is equipped with three dedicated SPDT relays rated for 2.0 amps @ 30 VDC or 110 VAC, 0.5A. These relays are dedicated to activate upon alarm, trouble or supervisory conditions at the control system. Trouble relay operates in fail-safe mode.

2.2.9 Signaling Line Circuits

Each Cheetah Control System is equipped with two signaling line circuits. Each circuit can communicate and control up to 127 devices each, for a total of 254 devices on the basic system. The circuits use a pure digital, interrupt driven protocol to improve response times while maintaining a high level of reliability. Any combination of sensors and modules can be used on each circuit.