FireFinder® XLSV

Digital Emergency Voice Alarm / Communication System

ARCHITECT AND ENGINEER SPECIFICATIONS

- Eight (8) digital audio channels
- Live and pre-recorded message capability
- Warden's page
- Modular design
- 25 or 70VRMS audio signals
- Central or distributed amplification
- Flexible system architecture
- Style Y ('Class B') or Z ('Class A') speaker circuits
- LED annunciator modules
- Style Y or Z audio risers
- High-quality amplifiers
- Back-up amplification
- Selectable tones with backup, auxiliary audio input
- Remote, intelligent audio, strobe and telephone-zone modules
- Optional firefighters' telephone system
- Separate call-in & telephone zone-fault indication
- Fan-control modules
- Custom recordable messages
- Background music and convenience paging
- Seismic Certified
- ®UL864 9th Edition Listed & ⓊULC Listed; FM, CSFM & NYCFD Approved

System Overview

The FireFinder XLSV is a digital emergency, voice-alarm and communication system designed to be used with the Siemens — Fire Safety FireFinder XLS Life-Safety System. XLSV is programmed via a Windows® laptop computer, using the ZEUS software application.

XLSV will respond rapidly to either automatic or manual commands from system logic or switch modules located on the command console(s). Digital audio signals, such as: *Evacuation 1*, *Evacuation 2*, *Alert 1*, *Alert 2*, or *Page* can be routed to any number of speaker circuits. A wide selection of microcontroller-controlled tones with backup is available.

One (1) or more notification-appliance circuits (NACs) can be mapped to switches though the Zeus Windows-based programming software. Switches can be used to manually activate or deactivate any zone. Through the use of multicolor LEDs, a clear indication is provided to show which zones are active and linked to the respective audio channel.

The Live Voice Module (Model LVM) includes a dynamic microphone with a push-to-talk switch and ready-to-page indicator light, as well as a small local speaker and volume control for monitoring audio signals.

An optional, pre-announce tone is also available.

FireFinder® XLSV System Overview **6340**

System Overview – (continued)

Additionally, the XLSV panel meets current NFPA code requirements by providing another two (2) digital audio channels that are available for background music and convenience paging.

As an option, the XLSV Digital Message Card (Model XDMC) programs and sounds custom voice messages for emergency and non-emergency building-notification requirements. XLSV can also optionally provide a Firefighters' Telephone with both an *acknowledge* tone and *busy* signal. Clear indication is provided at the command console as to which telephone zones are active. The Firefighters' Master Telephone provides a red, master telephone with retractable coil cord and push-to-talk button.

Remote paging can be provided from any telephone zone (warden's page) with selection at the command console. In addition, specific telephone zones can be pre-selected as automatic page zones on a selective or 'all-call' basis.

Speaker zones are selectable for either 25 Volt or 70.7 Volt operation, as well as either Style Y ('Class B') or Style Z ('Class A') wiring configuration. Strobe circuits may also be wired as StyleY or Style Z.

Speaker, strobe and firefighters' telephone zones can be provided as either modules or plug-in type cards, installed in the main enclosure or remote voice system transponders. The cards are plugged into the standard XLS Model CC-5 / CC-2 card cages.

The XLS Control Point Module (Model HCP) can also be used to provide a remote telephone zone, speaker zone or notification appliance circuit.
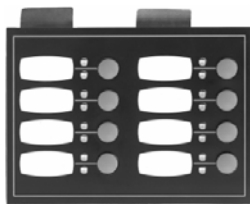
SCM-8

SCM-8 — Switch Control Module

Model SCM-8 is a FireFinder XLS-option module, which provides manual control of the Emergency Voice Evacuation System or manual fire system control. Each Model SCM-8 module provides eight (8) momentary push-button switches and 16 LEDs to indicate their status. Each switch is assigned two (2) LEDs and a label to indicate the Model SCM-8 switch's programmed usage.

The label slides behind a clear, protective membrane, and one of the LEDs assigned to each switch is a dual-color LED used to indicate what type of signal is active. Each Model SCM-8 and switch is fully programmable, and may be used to control speaker circuits and a wide range of general-system functions such as: *All Call*, *All Evac*, *Warden's Page*, *Speaker*, etc.

Any number of circuits may be grouped and controlled by a single switch. Switch usage and zone groupings are assigned using the *Zeus* programming software.

Each Model SCM-8 is mounted on a hinged panel, as part of the FireFinder XLS Command Console enclosure.
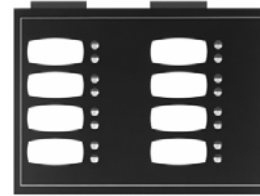

LCM -8

LCM-8 — LED Control Module

Model LCM-8 is a FireFinder XLS option module that provides LED annunciation for system activity. Each Model LCM-8 module contains eight (8) groups of two (2) LEDs – each of which can be assigned to desired outputs using the ZEUS programming software. Eight (8) LEDs are dual-color capable of being lighted either *Red-or-green flashing* or *Steady*. The remaining LEDs are *Amber-flashing* or *Steady*. A space is provided for labeling of LED functions.

The label slides behind a clear, protective membrane. Model LCM-8 dimensions are identical to Model SCM-8, and Model LCM-8 is mounted on the same hinged panel as a part of the FireFinder XLS Command Console enclosure.
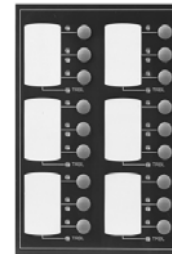
FCM -6

FCM-6 — Fan, Damper Control Module

Model FCM-6 is a FireFinder XLS command console option module that provides manual control of building HVAC system fans and dampers. Each Model FCM-6 module provides six (6) sets of three (3) push-button switches for manual system control. Each switch has three (3) associated LEDs to indicate Fan / Damper / Motor status: *Off* (Red LED), *On* (Green LED), *Trouble* (Yellow LED).

LVM

LVM — Live Voice Module

Model LVM provides a supervised, high-quality and dynamic microphone as a means of sending live voice messages to specified audio zones. Model LVM mounts on the inner door of a Model CAB1, Model CAB2, Model CAB3 or remote lobby enclosure. Model LVM includes a microphone with a push-to-talk switch and retractable coiled cord. The microphone and push-to-talk switch are fully supervised.

Model LVM also provides a green pre-announce LED that indicates the pre-announce signal is active at the selected zones and a green ready to page LED, which indicates selected zones are ready to be paged. The pre-announce signal can be programmed as a tone or message and the duration is adjustable from 0 to 10 seconds in one-second increments. A built-in speaker with volume control allows the monitoring of the audio channels.

The front panel of Model LVM contains six (6) switches and six (6) pairs of LEDs. Each pair contains one (1) dual-color (red / green) and one yellow LED. These switches can be programmed for manual voice functions as well as generic system functions. When the switches are used as generic switches, all LEDS can be programmed for ON, OFF or FLASHING.

DAC-NET

DAC-NET — Digital Audio Card

Model DAC-NET provides the audio source for the FireFinder XLS Voice Evacuation System, as well as D-NET network communication to and from Model PMI and between enclosures. Model DAC-NET is able to transmit eight (8) digital channels of audio, via two (2) pairs of wire.

One (1) Model DAC-NET is required in each XLS Voice enclosure. A maximum of 32 Model DAC-NET cards are allowed on a single XLS FireFinder system. Model DAC-NET can be wired 'Class A' (Style 7) (four [4] pairs of wires) or 'Class B' (Style 4) (two [2] pairs of wires). Model DAC-NET card plugs into one (1) slot in the Model CC-5 or CC-2 card cage, and has on-board LEDs for system status and troubleshooting.

Indication of power, communication, internal operation, ground fault, and trouble conditions are provided. Model DAC-NET Card contains an on-board microprocessor that provides communication with switch modules, LED modules, microphone, telephone zone cards, and zone amplifiers across the Control Area Network CAN Bus.

Model DAC-NET can supervise up to 99 CAN address modules, and contains on-board tones and pre-recorded EVAC and ALERT messages. In addition, custom messages or tones can be downloaded to the DAC-NET using the XLS software tool, ZEUS, for a total of five (5) minutes of storage memory.


LPB

LPB — Local Page Board

The Local Page Board (Model LPB) is used to connect the microphone — mounted inside the Live Voice Module (Model LVM) — and the voice-internal telephone system. Model LPB is a plug-on board to Model DAC-NET, and converts the two (2) analog input signals into the system's internal digital format.

Up to five (5) Model LVMs can be connected to Model LPB. Additionally, Model LPB provides one (1) analog output to connect to the monitor speaker, which is mounted inside Model LVM. The one (1) analog output is one (1) of eight (8) voice-internal audio channels selectable at the XLSV fire-alarm panel.
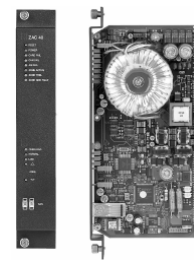
ZAC-40

ZAC-40 — Zone Amplifier Card (40 Watt)

Model ZAC-40 is a combination 40-Watt, amplifier / speaker zone for use with FireFinder XLS. Style Y, Z or "A / B" speaker-zone wiring configurations are supported. Model ZAC-40 is power limited, and can be configured to provide 40 Watts of audio at 25VRMS or 70VRMS. Model ZAC-40 is a plug-in card that mounts in a Model CC-5 or CC-2 card cage.

Model ZAC-40 is capable of amplifying any of the eight (8) digital audio channels that are transmitted from Model DAC-NET, via the digital audio bus: Model ASI (Audio Serial Interface).

Model ZAC-40 is supervised for functionality, and provides a single, 40-Watt speaker zone that supports two (2) speaker circuits. Model ZAC-40 can be used for (1) one-to-eight (8) channel applications, or as a bulk amplifier for (1) one-or-two (2) channel applications — feeding high-level audio to Models ZIC-4A and ZIC-8B. Model ZAC-40 can also be used for single-channel applications feeding high-level audio to Model HCP.

ZAM-180

ZAM-180 — Zone Amplifier Module (180 Watt)

Model ZAM-180 is a combination 180-Watt, amplifier / speaker zone for use with FireFinder XLS. Style Y or Z speaker-zone wiring is supported, as well as split-zone (A / B) speaker zone wiring configurations on Style "Y".

Model ZAM-180 can be configured to provide 150 Watts of audio at 25VRMS or 180 Watts of audio at 70VRMS.

Model ZAM-180 mounts in one (1) module space directly on the back box or optional Model CAB-MP mounting plate. Model ZAM-180 is capable of amplifying any one (1) of the eight (8) digital-audio channels that are transmitted from Model DAC-NET (Digital Audio Card), via the digital audio bus: Model ASI (Audio Serial Interface). Model ZAM-180 amplifier is supervised for functionality.

Model ZAM-180 can be used as a single 180 Watt speaker zone for (1) one-to-eight (8) channel applications or as a bulk amplifier for (1) one-or-two (2) channel applications feeding high-level audio to Model ZIC-4A or Model ZIC-8B.

FMT

FMT — Fireman's Master Telephone

Model FMT provides firefighters with an emergency telephone system for communication with remote locations. Model FMT mounts to the rear of the inner door of a Model CAB 1, Model CAB2, Model CAB3, or Model REMBOX4 Enclosure. Model FMT includes a handset for the operator of the telephone system.

The XLSV firefighters' telephone unit is designed for maximum performance in communication. The circuitry for Model FMT allows the master telephone and, at least five (5) telephone stations, to be off hook simultaneously with no degradation of audio quality.

Model FMT also supports a 'warden's page' function, which allows live voice announcements from any remote telephone. Telephone zone call-ins are annunciated on the appropriate Model SCM-8 switch module.

Remote stations receive an *acknowledge* tone when dialing into the command center prior to the call being answered, indicating a call-in in progress and a busy tone if calling into the command center and another telephone zone is already on line.

Diagnostic LEDs are located on the back of Model FMT to indicate power is applied to the module and failure of the card, CAN communication or phone.


TZC-8B

TZC-8B — Firefighter's Telephone Zone Card

Model TZC-8B provides a way for emergency-response personnel located throughout a building to speak to one another during emergency situations.

Model TZC-8B is a FireFinder XLSV option module that plugs into a Model CC-2 or CC-5 card cage, providing eight (8) firefighters telephone zones. The zones have an off-hook acknowledge tone, as well as a command-console 'busy' tone.

Each telephone zone uses a single pair of wires, and is individually supervised in a 'Class B' type mode. Field wires are connected to one or more phone jacks or stations. Zones are also individually power limited, per NEC 760, and each zone also contains transient protection.

A maximum five (5) telephone stations may be off-hook simultaneously in a party line mode with no loss of audio quality.
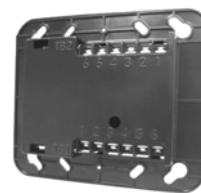

HCP

HCP — Control Point Module

Model HCP provides an intelligent control point for the FireFinder XLS Control Panel. Model HCP can be programmed as an independent, remotely located tele-phone zone, speaker zone or notification appliance circuit.

Model HCP is designed to be used with the Siemens — Fire Safety notification-appliance circuits (NACs) product line. Model HCP communicates through the Model DLC analog loop and can be wired – either 'Class A' (Style Z) or 'Class B' (Style Y). The 24 VDC power input comes from either the control panel or from any ®UL Listed, power-limited auxiliary power supply.
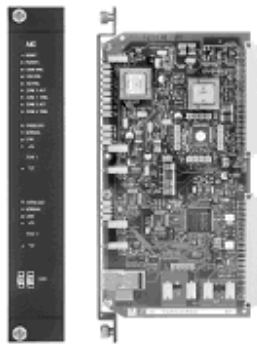
AIC

AIC — Audio Input Card

The Audio Input Card (Model AIC) provides two (2) external, isolated analog inputs to the FireFinder XLS voice system. Model AIC also provides two (2) dry-contact inputs, used to separately activate the two (2) audio inputs. The two (2) external, isolated analog inputs connect to the voice system for external sources, such as: tape recorder, CD player, PBX interface (for convenience paging from the telephone system).

The two (2) dry-contact inputs can activate the two (2) audio inputs separately. The aforementioned connectivity permits each input to be controlled automatically, via system logic or manually through switches on the voice control panel.

The maximum number of Model AIC cards on a single FireFinder XLSV System (single node) is two.

PFT

Portable Firefighter's Telephones

Portable Firefighters' Telephones (Models PFT and PFT-P) are available for field connection to the emergency telephone system. Each phone consists of a rugged, high-impact plastic handset with a red, coiled phone cord attached to the PFT. A 1/4" phone-plug assembly is attached to the end of the phone cord for connection to the field-mounted phone jacks.

Model PFT-P includes a momentary spring-action, push-to-talk switch mounted in the handset. Hence, Model PFT-P allows users to depress the button to activate the mouthpiece of the handset when speaking, in order to reduce background noise on the system.

The Model MTE-2 Telephone Enclosure includes the enclosure and door with clear lens, and can be used to store a maximum six PFT or PFT-P telephone handsets in a locked cabinet.

SIEMENS Industry, Inc.
Building Technologies Division

FJ-304

Remote Telephone Jacks

Remote Telephone Jacks, (Models FJ-303, FJ-303SS, FJ-304, and FJ-304SS) which are connected to the emergency telephone system, are wired to the telephone zone circuits on the Model TZC-8B Telephone Zone Card, located in the FireFinder XLS system enclosure. There is no limit to the number of remote telephone jacks that can be connected to a single telephone zone circuit. The remote telephone jacks are mounted to a single-gang electrical box.

Models FJ-303 and FJ-303SS have flying leads connected to the phone jack, while Models FJ-304 and FJ304SS have screw terminals. Models FJ-303 and FJ-304 have a red-baked, enamel finish with a white, silk-screened telephone handset icon, and Models FJ303SS and FJ-304SS have a brushed, stainless-steel finish with the handset icon.

FB-300 with FTS

Remote Telephone Stations

Remote telephone stations for the emergency telephone system consist of a handset / hook assembly, a wall-mounted back box, and a locked door with a breakable glass panel. Models FTS, FTS-P, FTS-C, FTS-CL, and FTS-PLC Remote Telephone Stations consist of a handset (similar to the PFT), a back plate, handset cradle with magnetic switch mounted to the back plate, and a connection cable from the handset to the back plate.

The -P designates that a momentary, push-to-talk button is included in the handset. The -C designates that an armored cable is used in place of a coiled retractable cord between the handset and the back plate. The 'L' designates that an integral LED is mounted to the back plate to indicate two-way communication is established between the phone and Model FMT.

Remote Telephone Stations − (continued)

The remote telephone station must be used with either the FB-300 or FB-301S remote telephone-station back box. The FB-300 is used for flush-mount configurations, and the FB301S is used for surface-mount configurations. The remote station / back box assembly also requires the FC-300S cover with key-lock door and breakable glass.

FT-GLS

FT-GLS — Replacement Glass

Additional replacement glass for the FC300S is available as the Model FT-GLS.

ALCC

ALCC — Audio Level Conversion Card

The Audio Level Conversion Card (Model ALCC) provides the capability of conducting a global-emergency page across multiple, remote FireFinder XLSV nodes with each audio riser holding a maximum of 63 nodes.

The emergency page originates at a FireFinder XLSV or MXLV global-paging station, where it is broadcast at 70VRMS over an audio riser by Model ZAC-40 (FireFinder XLSV) or Model ZAC-30 (MXLV) amplifier.

Temperature and Humidity Range

Products are ®UL 864 9th Edition Listed for indoor dry locations within a temperature range of 120+/-3°F (49+/-2°C) to 32+/-3°F (0+/-2°C) and at a relative humidity of 93+/-2% at a temperature of 90+/-3°F (32+/-2°C).

XDMC

XDMC — Digital Message Card

The Digital Message Card (Model XDMC) provides the capability of programming and sounding custom voice messages for *Evacuation*, *Alert*, *Tornado Warning*, *System Testing* and other emergency and non-emergency building-notification requirements.

Model XDMC, which serves as a XLSV optional module, plugs into an available expansion slot in the Model CC-2 / CC-5 card cage. Each XLSV system can support a maximum two (2) Model XDMC modules. Each Model XDMC can be programmed for up to 300 different custom messages.

Details for Ordering

Model Number	Part Number	Description
AIC	500-035300	Audio-Input Card
ALCC	500-650127	Audio Level Conversion Card
DAC-NET	500-035100	Digital Audio Card
FB-300	500-680587	Remote Telephone Stations
FCM-6	500-033140	Fan Control Module Switches (On / Off / Auto)
FJ-304	500-692670	Remote Telephone Jacks
FMT	500-034100	Fireman's Master Telephone
HCP	500-034860	Intelligent Control Point
LCM-8	500-033100	LED Annunciator Module (8 LED Sets)
LPB	500-035200	Local Page Board
LVM	500-034090	Live Voice Module
PFT	500-699427	Portable Firefighters' Telephones
PMI	500-033070	Operator Interface/ System CPU
PMI-2	S54430-C1-A1	Person Machine Interface 2
SCM-8	500-033040	Switch Module (8 Switches)
TZC-8B	500-034110	Firefighter's Telephone Zone Card
ZAC-40	500-035400	Zone Amplifier Card (40 Watt)
ZAM-180	500-035600	Zone Amplifier Module (180 Watt)
XDMC	S54430-B5-A1	Digital Message Card

Note: Equipment for FireFinder XLSV is listed and approved as part of the FireFinder XLS system.

▪ See data sheet: 6300 for ordering information on additional FireFinder XLS equipment.

Notice: This marketing data sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.