



KEY FEATURES

- Integrated, Mission-Critical class system
- Fully NENA compliant
- Optional Integrated TDD, IRR and Phone Book
- Zetron Digital Audio Control (ZDAC™)
- Automatic Phase II Wireless ALI Repeat

INTRODUCTION

Zetron's highly reliable integrated E9-1-1 Telephone System is designed for the mission-critical nature of Public Safety Answering Points (PSAPs). The Series 3200 integrates a feature-rich phone system with an ANI/ALI Controller, utilizing a distributed architecture and digitally processed audio to provide an exceptional level of performance, flexibility, and reliability. When properly configured, the Series 3200 is compliant with the *NENA Generic Standard for E9-1-1 PSAP Equipment*, NENA-04-001.

A number of unique standard features of the Series 3200 increase operator productivity while reducing workload, stress and fatigue. With additional options, the Telephone Consoles can serve as an Instant Recall Recorder (IRR) and a Telecommunications Device for the Deaf (TDD).

SYSTEM FEATURES

Integrated Switch Platform

The Series 3200 handles ANI/ALI, 9-1-1 trunks; admin lines and ringdown lines; in the same system. The admin lines can accept Caller ID if the attached central office or PBX delivers it. Thus operators can use a single Series 3200 console to handle all of their telephone needs.

Mission-Critical Switch Platform

Unlike many vendors who rely on commercial third-party switch or PBX platforms, Zetron uses a mission-critical quality switch platform of its own design and manufacture. This ensures that our customers are not affected by the limitations and availability of such third-party equipment.

COMPLIANT

NENA Compliant

The Series 3200 was the first call taking system designed from the ground up to be fully compliant with NENA 04-001 "Generic Standards for E9-1-1 PSAP Equipment". In addition, it meets over 12 other industry specifications.



No Single-Point-of-Failure

The distributed architecture and high MTBF design of the system ensures not only high availability, but also minimal impact in the event of a failure. When properly configured a single failure typically impacts only one console or trunk, but never more than half the system.

MAINTAINABLE

Local & Remote Alarms

In the event of a failure, built in diagnostics generate alarms to PSAP personnel, and if optionally equipped, to remote repair technicians. Via secure dial-up connections, technicians determine the exact cause of the failure and in some cases, restore complete operation remotely.

Redundant ALI Controller

If a PSAP considers ALI an essential feature, the optional second ALI Controller can be installed. Thus if an ALI Controller fails, the other Controller automatically takes over its functionality with no disruption of call state.

Live Repairs

The system is designed to allow hot-swappable component replacement while the system is operating. Thus power supplies, cards and consoles can be replaced with minimal disruption to service.

Line Check™

A unique feature of the system is its ability to detect administrative line continuity from a central office or PBX. If continuity is disrupted, PSAP personnel can be notified that these lines are no longer functional. Because admin lines often run in the same trench as 9-1-1 trunks this can also indicate potential 9-1-1 trunk disruption. This type of supervision can contribute to a favorable ISO NFPA 1221 rating.

Night Service

If it becomes necessary to abandon a PSAP, the Night Service feature provides an easy way to signal the 9-1-1 provider to route 9-1-1 calls to an alternate PSAP.

OTHER SYSTEM FEATURES

Digital Audio Control (ZDAC™)

Although the Series 3200 uses digital audio, it goes a step beyond "digital" by enhancing audio quality rather than just preserving the quality. Zetron Digital Audio Control (ZDAC) helps compensate for volume levels that vary from line to line and helps ensure a more consistent volume level for call takers. This is made possible by extensive use of Digital Signal Processors (DSPs).



Automatic Wireless ALI Repeat

Most Phase 2 wireless calls are initially delivered using Phase 1 data because Phase 2 data availability usually lags call delivery by several seconds. The 3200 system can be configured to automatically make a second ALI retrieval to obtain the Phase 2 ALI information without operator intervention. Operator controls also permit continuous updates for moving incidents.

Remote Consoles

The Series 3200 supports both remote consoles and call groups. This capability allows several separate PSAPs to share a common Series 3200 system, thus greatly reducing the cost of a regional 9-1-1 system. Consoles can be remotored via FX and data circuits, or over IP.

Busy Announcement

With the optional Busy Announcement feature, whenever all call takers are busy, 9-1-1 callers can receive a pre-recorded voice announcement in place of ringing.

FCC Phase 1 & 2 Compatible

The Series 3200 was designed from the beginning to handle Phase 1 and 2 wireless calls. With its Enhanced MF capability it is able to accept all call delivery methods including CAS, NCAS and HCAS.

Remote ALI Transfer

Many times secondary PSAPs are not equipped with their own ANI/ALI Controller. In these cases when a 9-1-1 call is transferred to such a site the voice is transferred, but the ANI/ALI data is not. With the Remote ALI Transfer option, the ANI/ALI can be sent to a printer at the secondary PSAPs via a separate data path.

CAD & GIS Interfaces

A standard feature of the Series 3200 is a NENA compliant Computer Aided Dispatch (CAD) port which delivers ALI data upon call answer. This port can be used by both CAD and GIS (Mapped ALI) systems to automatically populate address fields and to display map locations.

BUTTON CONSOLE FEATURES

Most Advanced Button Consoles

The Series 3200 Panelmount and Desktop Telephone Consoles are the most advanced button-based consoles in the 9-1-1 industry. One reason is that most of the features that were formerly provided by external equipment are integrated into the Series 3200 Telephone Consoles. This includes the optional Telecommunications Device for the Deaf (TDD), Instant Recall Recorder (IRR), and Phone Book. In addition, the Series 3200 Consoles come equipped with many features tailored for the 9-1-1 environment.

With such a range of features the Series 3200 button-based consoles rival the latest computer telephony integrated (CTI) workstations in capability. However, Zetron also offers Integrator 9-1-1™, a CTI console for use with the Series 3200. For more information see the Integrator 9-1-1 specification sheet.

Integrated TDD

The consoles may optionally be equipped with an integrated Telecommunications Device for the Deaf (TDD/TTY). The TDD feature is fully ADA compliant and includes HCO/VCO, Baudot and ASCII compatibility, as well as compliance with Wireless TTY standards. Buttons on the console permit quick sending of pre-programmed messages, or by plugging in the optional keyboard, free-form text may be sent.

Integrated Phone Book

An optional phone book may be added to consoles to provide a list of up to 320 names and numbers. Any entry may be assigned as a single-button auto dial. The list may be searched alphabetically using up/down buttons or by using the optional keyboard to perform name matches.

Distinctive Ringing

Up to 12 different ringing sounds can be assigned to each group of lines so that operators can tell what type of line they will be answering without looking at the phones.

Internal Transfer

The system allows calls to be transferred within the PSAP to other operators, consoles or groups. This feature helps distribute calls within the center more efficiently and quietly than the traditional "hold-and-holler" method. It also facilitates dividing the PSAP call-takers into logical agency groups, such as police and fire groups.

Priority Answer

Each type of line in the system can be assigned high, medium or low answer priority. By pressing the phone's Answer button, the highest priority, longest ringing line is always answered first.

COMPUTER TELEPHONY INTEGRATION (CTI)

Integrator 9-1-1™ is a Windows® 2000, Windows® XP Pro, or Vista Computer Telephony Integration (CTI) application that adds PC-based 9-1-1 call handling capability to Zetron's feature-rich E9-1-1 Telephone System. More details can be found in the Integrator 9-1-1 specification sheet.



CTI/PC Backup

Even when using Zetron's Integrator 9-1-1 CTI software, workstations can be equipped with some type of telephone console. These telephone consoles provide full or partial backup operation in the event of a PC workstation failure. The consoles used with CTI may be either desktop or rackmount consoles for full backup or the space-saving Model 3299 headset jack console which contains an Answer and Release button for minimal backup.

LAN Not Required

Integrator 9-1-1 can tolerate a total failure of the computer network and still maintain essential features, including voice, ANI, and ALI.

ACD Designed for Public Safety

Zetron's Integrator ACD solution is not limited to business call center features. Multiple calls can be put on hold as operators continue to answer calls. Console call view allows every operator to view the complete status of all calls and operators ("who has what") including Logged-on, Ready, Not Ready, Queue membership, Assigned calls state (ring, connect, hold, outgoing, etc), and Assigned call data (Caller ID, ANI, ALI, duration). See Integrator ACD specification sheet for more details.

Operator Logon

Using Zetron Account Manager (ZAM) administrators are able to assign profiles and permissions to call takers. Thus, when a call-taker logs on, their preferences and permissions follow them. This includes call group membership, personal dial list, supervisory features, and screen color/layout.

Supervisor Alert

Operators can send text messages to supervisors in order to prompt an action on their part. Messages are canned, i.e. "listen in on this call" or can be free text. This allows operators to quickly receive help when responding to difficult calls.

ALI Correction

Upon determining that there is an error in the ALI database, call takers may append corrections to an ALI record and forward these by printout or email for review by a designated person.

Pre-Answer ANI/ALI

With Pre-Answer ANI/ALI, the ANI and ALI of all incoming calls are shown on each individual line appearance. This allows the user to see call information at all times, not just when they connect to the line. This includes before answer and when answered by another operator. On screen information also shows which console is connected to a line.

Easy Migration

Integrator 9-1-1 is as easy to use as a telephone and at the same time it provides integration with other Integrator Suite applications such as Integrator RD™ Radio Dispatch, Integrator Map™, Integrator ACD™, and Integrator MIS™.

Mapped ALI Compatibility

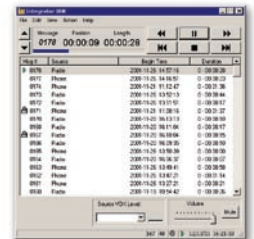
Integrator 9-1-1 seamlessly integrates with Integrator Map. Integrator Map is an automated E9-1-1 call location mapping application which provides the ability to dynamically locate, graphically display and manage incoming E9-1-1 calls.

Integrator 9-1-1 can also interface with InterAct's Geo911, BullBerry's R3GIS, GeoComm's GeoLynx, MicroDATA's ALI-Trakker and other third-party Mapped-ALI applications. See the Integrator Map specification sheet for more details.

Fully Integrated IRR

An integrated PC-based Instant Recall Recorder (IRR) option is available, offering built-in telephone and radio voice recording with instant playback. Integrator IRR is designed to augment voice logging recorders by providing a non-archiving recording system local to the operator.

IRR is also available for button-based consoles and provides up to eight minutes of conversation recording. Playback is via the console's handset or headset. See the Integrator IRR specification sheet for more details.



Portable PSAP

The Portable PSAP is a quickly deployed, self-contained version of the Series 3200. It is perfect for PSAPs whose contingency plans call for a portable backup PSAP. It comes equipped with two trunks and two desktop consoles. It may be expanded to ten trunks/lines and ten consoles. The Portable PSAP is contained in two rugged, shock-mounted, wheeled cases for easy transport. For more information, see the Portable PSAP specification sheet.

SPECIFICATIONS

PHYSICAL

	HWD, WGT
Model 3210R/3230R	5.25" x 19" x 4", 6.5 lb.
Model 3240D	12" x 12" x 5", 5 lb.
Station Card Shelf	17.5" x 19" x 12", 10 to 35 lb.
Line Card Shelf	5.25" x 19" x 10", 6.5 to 15 lb.
AC Power Supply	7.5" x 19" x 6", 14 lb.

ELECTRICAL

Power	100 to 134Vac, 57 to 63 Hz
	KSU: 200 Watts/3 Shelves
	Stations: 36 Watts each
	Power Supplies UL Listed
	–OR–
	-43.5 to -56.5VDC
	KSU: 2.25 A/shelf
	Stations: 1 A each

COMPLIANCES

FCC	CFR 47 Parts 15 and 68, Docket 6787
EIA/TIA	RS-310, 478, 574, PN-1663
Bellcore	TA-NPL-000912, TR-NWT-000030 & 001188, TR-TSY-000064 & 000350
NENA	04-001, 04-002, 03-002
UL	E152324 and E106284

LINE INTERFACES

Connectors	RJ-21 male plug for each Line Card Shelf (10 lines)
Standard Line Types	Loop-start (POTS), Loop-start w/ Caller ID, Manual ringdown (AC sig), Auto ringdown (DC sig), Station ringdown

E9-1-1 TRUNK INTERFACE

Trunk Type	2-wire, reverse battery, 900 ohm, accepting MF (R1) signaling
Signaling & Protocol	
Direct CO	Selectable wink, wink-wink, wink-reverse and reverse
Tandem CO	Complies with Bellcore TR-TSY-000350 & NENA-04-001
Enhanced MF	Complies with NENA-03-002

ALI INTERFACE

Connectors	RJ-14 for each link (internal modem) or DB-25 male wired as DTE (external modem)
Signaling	4-wire 1200 baud Bell 202, 0 dBm transmit (internal modem) or up to 9600 baud RS-232 (external modem)
Protocol	Complies with NENA-04-001 (AT&T style) or NENA-03-002

CAD INTERFACE

Connector	DB-25 female wired as DCE
Signaling	RS-232, 1200 to 9600 baud
Protocol	Complies with NENA-04-001 (AT&T style)

MASTER CLOCK INTERFACE

Connector	DE-9 male wired as DTE
Signaling	RS-232 (EIA/TIA-574) 1200 to 9600 baud
Protocol	Complies with NENA-04-002 (Spectracom Format 0)

CDR PRINTER INTERFACE

Connector	DE-9 female wired as DCE
Signaling	RS-232 (EIA/TIA-574) 9600 baud
Protocol	Abbreviated ASCII text

TELEPHONE CONSOLE PORTS

Recorder Infc	Common Tip/Ring plus Contact Closure
Radio Headset Infc	Handset Port plus Contact Closure

Handset/Headset Port

Connector	Two standard 4-pin modular handset jacks; one front, one rear
Transmitter	500 ohm input impedance, carbon compatible. Biased from 12 V via 1K ohm. Bias must flow for transmit audio to function.
Receiver	100 ohm output impedance

TDD/TTY COMMUNICATIONS

Signaling	Per ANSI/TIA/EIA-825, and NENA-04-001
Protocol	5-bit Baudot at 45.45 baud, 7-bit ASCII at 300 baud

ENVIRONMENTAL

Operating Temp	0° to 50°C (32° to 122°F) (5° to 37°C for power supply)
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NENA Generic Standards for E9-1-1 PSAP Equipment (NENA-04-001) is an industry recommendation jointly developed by telephone companies and equipment manufacturers. It covers interfaces, features, power requirements, environmental requirements, quality and reliability. To obtain a copy visit the National Emergency Number Association website at www.NENA9-1-1.org.

ZETRON USA

PO Box 97004
Redmond, WA
98073-9704
USA
TEL 425 820 6363
FAX 425 820 7031
zetron@zetron.com

ZETRON UK

27-29 Campbell Court
Bramley TADLEY
Basingstoke RG26 5EG
UK
TEL +44 (0)1256 880663
FAX +44 (0)1256 880491
uk@zetron.com

ZETRON AUSTRALASIA

PO Box 3045
Stafford Mail Centre
Stafford QLD 4053
Australia
TEL +61 7 3856 4888
FAX +61 7 3356 6877
au@zetron.com



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