Security, Safety & Control™ SEON

Invitation to Bid

State of West Virginia 2019 Washington Street East Charleston, WV 25305 Attn: Connie Oswald

RFQ - EDD388676

02/27/13 09:47:18 AM West Virginia Purchasing Division February 28, 2013

State of West Virginia 2019 Washington Street East Charleston, WV 25305 ATTN: Connie Oswald

Dear Ms. Oswald,

Seon Systems Sales (Seon) is pleased to present a complete overview of our corporate structure and product offerings for North American fleet applications. Please find the enclosed information, which has been included for your perusal.

As a recognized leader in the field of mobile video surveillance systems manufactured specifically for pupil transportation industry, Seon utilizes its own in-house Research & Development teams to design innovative hardware and software platforms with a focus on modularity, flexibility, and future expansion.

In business since 1999, Seon has over 100,000 recording systems in place working with hundreds of public school districts throughout North America. Our unsurpassed reputation has been built on a solid foundation of reliable products, long-term relationships with our clients, and a support mechanism that is second to none. Our approach to business ensures our clients realize the highest return on investment and lowest cost of ownership in the industry.

Seon has a clear understanding of the requirements for a digital video recording system as a powerful step in the goal of enhancing the safety of students and employees at State of West Virginia. Further, Seon understands the School District's need for an adaptable platform to meet the technological needs of the future. To meet these requirements, Seon is proposing its TL4 system; the TL4 is a robust machine and features the latest technology the mobile surveillance industry has to offer.

We intend to partner with the State of West Virginia to offer the following:

- An increased ROI by providing a path for upgrading technology as fiscal budgets allow
- An innovative, cutting edge, adaptable platform that allows for additional peripherals, system integration and future expansion
- A long-term partnership with our clients to develop customized hardware solutions and software applications, integration with other on-board technology while automating internal processes within the organization and minimizing incremental capital and operating costs

We are confident that our proposal offers high value propositions at low-risk based on the factors listed below:

- Industry leading experience with large, satisfied client base = PROVEN PARTNER
- Proven technology with long-standing track record for reliability = STABILITY
- In-house development and manufacturing capabilities = SHARED VISION

Cover Page

Seon Systems Sales

Thank you for the opportunity to share with you, the innovative solutions offered by Seon Systems Sales. We are confident that we are able to exceed the needs and expectations of State of West Virginia over the long-term.

Please do not hesitate to contact me at any time should you have any questions, concerns, feedback or if there is any further clarification I can provide.

Kindest regards,

Darrin Wilson

Darrin Wilson
Sales Executive
Seon Systems Sales Inc.
(e) dwilson@seon.com

(t) 877.630.7366

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Proposal Overview

Seon Systems Sales

Company Name:

Seon Systems Sales Inc.

Website:

www.seon.com

Key Contact:

Darrin Wilson

Telephone:

1.877.630.7366

Status:

Incorporated

Ownership:

Private

Head Office:

Coquitlam, B.C., Canada

Number of Employees:

110+

Profitable:

YES

Incorporated in 1999, Seon Systems Sales Inc. is ranked as the world's #1 supplier of mobile video surveillance for the bus and coach industry. With nearly 100,000 systems in the market place and a less than 1% return rate, it is little wonder that one out of every two school bus camera systems sold is a Seon solution. Seon's success is based on our ability to understand and meet the real-world challenges that our clients in the pupil and public transportation industries face every day. Understanding these challenges means that listening is fundamental. Feedback from our customers directly influences the design and engineering of our products, ensuring we meet our client's future and present needs. To this end, Seon invests \$3 million every year in continued product research and development.

Seon's core strength lies in our ability to remain flexible and adapt to the individual needs of school districts and transit properties large and small, offering end-to-end solutions that include robust hardware and software, a consultative approach to project planning and management and attentive post-project support. Seon works with clients to help them achieve operational efficiency and realize a higher return on investment through the automation and streamlining of video, system and fleet management, including integration with other on-board technologies. Offering matchless quality and dependability, Seon's mobile surveillance products are designed to lower the administrations requirements of managing onboard video recording systems and bus fleets. It is one thing to invest in new technology, but it is quite another to manage the equipment and data from fleets of 100 or more buses. This is where Seon shines, offering a range of effective management solutions, a suite of smart accessories and on-demand field support.

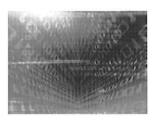
Seon has successfully managed and implemented projects throughout North America, building a brand that is known for quality and reliability. Seon's mission is simple: to provide superior mobile surveillance and fleet management solutions. For this reason, Seon employs its own team of highly qualified electronics, mechanical and software engineers, and assembles superior quality end-products in its 36,000 square foot North American-based manufacturing facility. Seon's products are "Buy America" compliant where applicable.

With its leading-edge customer service and responsive technical support team, Seon's dedication to customer satisfaction is unparalleled in the mobile surveillance industry. Seon stands behind its products, forging lasting relationships built on the sound investment that Seon clients enjoy year after year. With a growing team of dedicated sales professionals, project management and support staff and a network of loyal partners throughout the United States and Canada, Seon is positioned to continue its double-digit growth rate and increase its market share through the introduction of cutting edge, new technologies in 2011.

¹The World Market for Mobile Video Surveillance Equipment, IMS Research. This independent UK-based report is published every two years. Seon received the same recognition in 2007.

Research & Development

Seon Systems Sales



Based in North America, our engineering team develops robust, highperformance products designed to withstand the harsh mobile environments

they are deployed in. Seon sits on the leading-edge of the industry's latest technological advances because our engineers are working on your future needs on a daily basis. In an economic climate where most manufacturers are cutting back on research and development, we firmly believe the time is right to expand and provide the solutions our customers seek.

The R&D team at Seon is comprised of over 20 seasoned and experienced engineers specializing in a variety of engineering design disciplines including but not limited to:

- Mechanical
- Software
- Network
- Electronic
- IT and infrastructure
- Maintenance of line
- Engineering services

The above combination of diverse professionals ensure that Seon covers all aspects of the product development process, and give Seon the unique ability to tailor and customize mobile surveillance solutions to fit individual customer needs. Importantly, Seon's engineering team takes customer input and feedback seriously, as it often serves as the starting point for future product development and on-going product improvement.

Product design, testing, and verification of Seon product lines are completed within a state-of-the-art engineering facility. A dynamic working environment has enabled Seon to build a strong internal corporate presence specializing in IT and network infrastructure as the complexity of system integration continues to grow.

The Seon R&D department is responsible for project management and is home to many experienced project managers. Seon project managers are continually honing their skills as they pertain to project planning, development, and importantly - project execution and completion.

Seon project management methodology centers around guaranteeing, to the best of our ability, that project deadlines are met on time and both small and large scale installation projects are meticulously organized, communicative, and on-budget.

Sales & Marketing

Seon Systems Sales



At Seon, our sales support teams have the same priority as our technological innovations. Our sales representatives possess the combination of passion and

product expertise to deliver the Seon experience worldwide. Whether you are a new or existing client, Seon's sales and support team is here to help recommend the right solution to meet unique customer requirements and achieve the maximum return on investment possible. Support is more than providing pricing, updates, or helping with installation; it is about sharing our expertise to give you the very best advice and providing a solution that best fits State of West Virginia needs.

Our team is always standing-by for any on-going support our clients may need, before and after the sale. The Seon Sales Department consists of over 30 qualified and dedicated individuals, including 13 mobile regional account managers, whose responsibilities include:

- Providing consultative assistance at the outset of the project
- Building relationships and engaging in discussions in order to analyze the short and long-term needs of our existing and potential clients
- Managing all aspects of projects awarded to Seon and engaging our internal departments as necessary (i.e. project specification, installations, technical support, long term development strategies)
- Actively involving Product Management and R&D in order to ensure the ongoing needs of our clients are addressed with new technology

Along with sales, Seon's marketing team creates the product marketing, marketing communications, and public relations strategies that represent our products

to the world. Our innovative point-of-view is an integral part of the product development process. The Marketing Department's responsibilities include:

- Conducting market research and constantly evaluating the needs of the industry
- Creating easier methods for conducting business with Seon
- Developing web-based tools to enhance the level of support at our clients' disposal
- Overseeing the product management life cycle and laying-out Seon's technology road map to ensure it is aligned with industry needs
- Creating user-friendly product documentation Interfacing with R&D for the creation of userfriendly product and graphical user-interfaces (GUI)

"The mandate of the sales and marketing support teams is simple: to create and nurture long-term partnerships and provide a service, support, and customer interface that is unsurpassed in the mobile surveillance industry."

-Chris Akiyama Director of Sales Seon Systems Sales

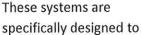
Manufacturing & Operations

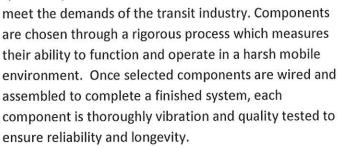
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Operations' role is to ensure that Seon's state-of-the-art designs become industry-leading products, delivered on time and on-specification. Operations drive Seon's manufacturing process as well as worldwide procurement and fulfillment. A highly motivated team of dedicated and efficient employees (over 50) manufactures the majority of Seon's products, in-house. Key factors that have led to Seon's outstanding reputation for reliability include:

Manufacturing

Seon builds its systems and products in-house and sources high-grade components from well-established suppliers.





Seon's ability to *completely control* the manufacturing process ensures greater quality control and product innovation, including the ability to modify products quickly to meet new customer demands; at Seon, product is not simply purchased and later resold.

Quality Assurance

Major components of our solutions are custom engineered by Seon's in-house engineering team or by qualified OEM suppliers. All incoming materials are verified for compliance with order specifications before being issued to the production floor.

In process, all electronics are handled using ESD-safe procedures and all circuit boards are 100% electrically tested prior to assembly. Additionally, all circuit boards are tested for power consumption and program integrity before assembly into the end-product. After assembly, all Seon products are visually and electrically tested to ensure 100% functionality.

Lastly, all products are tagged with traveling documents to ensure quality steps have been followed. Traveling documents are used in case a future review is required.

Seon's manufacturing capabilities are significant, with over ten-thousand systems shipped to new and existing clients on an annual basis.

References

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Seon has a long history of successful installation projects and workload transitions, all of which were completed on time, within budget, and without interruption to the client. Our past successes are largely due to the competence of our staff, the structure of our organization, and our detailed approach to project planning.

Over the past 11 years, Seon has successfully completed countless projects that are identical to the State of West Virginia project. Every project listed below was completed on time and within budget. Brad Green, Seon's Installation Manager, personally trains all Seon installers on best practices and develops new training plans and procedures as they're required to meet the demands of our growing client base

Dave Ziglar Ohio County Transportation Director 304-235-0434 Wheeling, WV dziglar@access.k12.wv.us

Joe Howard
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David Gump Marshall County Transportation Director 304-843-4449 Moundsville, WV bbertram@access.k12.wv.us

Ray Ellis Logan County Transportation Director 304-792-2044 Logan, WV rayellis@access.k12.wv.us

"Along with superior camera systems, Seon also provides excellent customer service. The support team is just a phone call away, and their sales reps always make sure our needs are met. Our experience with Seon has been nothing less than satisfying."

-Kenneth Morosko Fleet Supervisor

"Our Seon representative has always been knowledgeable, available, and there to help whenever needed. Seon does not forget you once they make the sale. I have recommended Seon to many colleagues in the U.S. – from those who have taken my recommendation, I have yet to hear a complaint."

-Jack G. Shelton Executive Director of Transportation

Seon Systems Sales Solution Overview Proposed Solution/Technical Response Seon is proposing its TL4 DVR with the CA Stop Arm Camera to meet State of West Virginia specified project requirements. The TL4 is one of the most technologically advanced DVRs in the mobile surveillance market. Designed to meet the very technical functionalities required by State of West Virginia, the TL4 is ready to tackle basic daily tasks, as well as meet the future demands and technological challenges of expanding school districts. The TL4 is an adaptable platform and will provide full video and audio coverage onboard the school buses. TL4 supports a variety of cutting-edge features and options designed to facilitate fleet control and incident management such as: Wireless connectivity **GPS** mapping Seon understands that the systems are intended to monitor the onboard activities of students and employees; our comprehensive lens sizes will provide virtually total onboard visual coverage. Further, each Seon camera features a built-in, omni-directional microphone that can be activated or deactivated depending on the level of audio coverage State of West Virginia desires. The TL4 features Seon Smart-Start technology which protects the DVRs from voltage spikes, reverse polarity, and other electrical transients commonly found in mobile applications; Smart-Temp, a temperature regulation system, further ensures the TL4 is always operating at an optimal temperature. The latitude and longitude of each vehicle will be recorded via GPS antenna (optional). This information will be displayed using GoogleMaps and synchronized with recorded video footage; please see Seon's product brochure for a deeper discussion of GPS functionality. 16 to 25 mm lenses for identifying stop-arm violation vehicles. The

The CA Dome camera

The outdoor CA Wedge offers durability and versatility in a rugged, vandal-proof housing that is both dust and waterproof. The camera is fully adjustable to increase the range of viewing angles. It supports lenses from 2.9 to 3.6 mm for wide-angle door-entry applications, and CA Wedge provides color imaging in normal lighting, and automatically switches to black and white in low-lighting conditions. Models with the optional infrared illumination deliver clear images up to 40 feet (13 meters) away in complete darkness.

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TL4 DVR Specifications

- H.264 compression
- Adjustable quality (compression) controls (1-4)
- Adjustable resolution settings (720x480, 720x240, 360x240)
- 500GB-750GB storage capacity
- Energy efficient
- Separate inertia sensor add-on
- 10 programmable timers
- Smart-Temp (Temperature protection)
- Smart-Start (voltage protection)
- · Adjustable frame rate (each channel 1-30 fps)
- 10 signal inputs
- 4 alarm inputs
- Wi-Fi ready
- GPS ready
- Mapping compatible
- Built-in, web-based interface for remote configuration and updating, as well as remote viewing
- Standard three (3) year warranty (parts and labour



CA Wedge Technical Specifications

- Features a high resolution 650 TVL day/night sensor for sharp images day and night.
- Performs with a variety of lens: 2.9, 3.6, 6.0, 16.0, and 25.0 mm for wide-angle to telephoto coverage.
- Provides anti-glare protection and scratchresistance.
- Delivers a rugged, weatherproof metal housing to increase vandal-resistance for external vehicle surveillance applications.
- Supports infrared illumination with adjustable intensity for improved night vision.
- Includes local video-out for quick setup and viewing of the camera.
- Standard three (3) year warranty
- Features a 350° rotating gimbal to support vertical and angular mounting.





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Solution Overview

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Wireless Connectivity (Optional)

Designed with Hewlett Packard, Smart-Reach is a robust, industrial mobile Wi-Fi solution capable of automatic roaming. Smart-Reach consists of a central base (located in an administrative office), wireless access points (distributed throughout the property), and wireless bridges (installed on the transit vehicle).

Unlike consumer wireless solutions, Smart-Reach technology enables our DVRs to drop weak wireless signals and pick-up stronger ones, facilitating quick download speeds. For example, when a bus enters the holding yard, it automatically picks-up a wireless signal and starts downloading daily video footage – no user intervention is required.² As the bus moves through the yard, if the first signal becomes weak, the DVR will 'switch' to a stronger signal – downloading remains constant and uninterrupted.

Seon offers the Smart-Reach wireless solution for use with the TL4. Smart-Reach is an 802.11g wireless radio that is available in single or dual band in order to act as an access point client or both.

Investment Protection & WLAN Security

Smart-Reach integrates Wi-Fi traffic directly onto the LAN right at the network edge, creating optimum application performance over the network infrastructure. Access Points forward the bulk of wireless traffic from the source destination without injecting a detour to the controller, enabling traffic to flow along the shortest path. It is this distributed data forwarding method that makes the Smart-Reach solution such a strong investment, not only because it makes the most efficient use of the LAN backbone, but also because it enables a significant, cost-effective migration to new, higher speed Wi-Fi technologies, such as 802.11n.

Access Points protect confidential network traffic by enforcing policies at the network perimeter. Client authentication, data encryption, filtering, and VLAN tagging are applied on a per-user basis, ensuring complete integrity for all traffic that transverses the LAN infrastructure

² Author's note: vMax Commander Software required.

Technical Compliance Matrix

	Bid Specifications	Seon Response
	General Requirements	
3.1.1	The unit shall contain at least three (3) cameras, a recorder, storage device, battery pack, GPS and mounting plate with vibration insulation.	Additional features and information: Utilizes bus electrical to prevent failure due to weather, vibration, and battery expiration/internal shorts.
	This system is to create a recording of an event that can be used to identify a violator of the West Virginia stop arm violation law. The unit shall provide a film clip from the time of the activation of the school bus stop arm until the arm is deactivated.	Compliant
	This unit must be portable and can be moved from school bus to school bus. In order to accomplish this, a mounting plate that can be installed on every school bus in the county fleet must be provided. The box and mounting plate shall be painted school bus yellow. There shall be a vibration insulator to isolate the shock and vibration between the vehicle and the DVR system	Additional features and information: The hardware is permanently mounted to eliminate compromised electrical connections, vibration, possible theft and vandalism. Color is white
3.1.1	The system must include at least three (3) cameras and the cameras must be able to record simultaneously. One camera is to capture, at a minimum, the rear license plate when a vehicle is passing from the rear of the bus. The second camera is to capture, at a minimum, the license place of the vehicle when it is passing from the front of the bus. The third camera is to capture, at a minimum, the driver of the passing vehicle. The activated stop arm is also to be captured by the cameras. The cameras shall be able to capture the license plates and the offending driver in the dark. The cameras shall be activated by a magnetic switch connected to the stop arm assembly. There shall be a motion sensor that marks the recording if a vehicle passing the bus with the "stop arm" activated.	Additional features and information: The system is in continuous operation requiring no external switches and possible malfunctions. This also eliminates pre and post record loop latency when ancillary evidence may occur. An "alarm button" is provided with the system to make the event/stop arm violation easier to locate within the data.
3.1.1	The camera shall be able to record at the highest quality video setting at no less than 720x584 resolution and at no less than 30 frames per second (fsp.) or better. The capture range shall be 10-27 feet and the capture speed up to 56 mph. The color cameras shall include a minimum illumination of 0.6 Lux at F1.2 and 0 Lux on IR mode. Cameras shall include the following: Shatterproof Lenses Anti-glare Glass Scratch Resistant Lenses High impact, vandal proof, stainless steel, and waterproof housing. Built-in Infrared Lighting for improved night/low light viewing Built-in electronic shutter and automatic gain control with automatic white balance Temperature resistant circuitry Wide Dynamic Lenses Lens sizes shall be specified by the vendor to optimize the view	Additional features and information: The system records at 60 FPS at 720 X 480 resolution and utilizes .H264 compression. The exterior cameras produce images at 650 TVL. This combination yields a superior image to 720X584 using MJPEG compression. True IP67 weather proof environmental rating, solid aluminum alloy for aircraft quality Performance.

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	from all locations. Waterproof connections The bidder must identify the appropriate cameras and lenses to have full view of bus area	Lens sizes provided – see attached camera configuration Compliant
3.1.2	The DVR software shall be protected against unauthorized viewing or editing of the recorded video. The software needs to be able to expand to full screen viewing. The software shall not require multiple licenses for use on multiple computers.	Compliant
	The DVR system's power shall be self-contained in the system box. The system shall have its own power pack. The storage systems shall use a memory card that is minimum of 32 GB for one day of recording and that is easily removed from the system's lockable box. The system shall have a GPS unit that will identify the location coordinates of the videos.	Additional features and information: Utilizes bus electrical to prevent failure due to weather, vibration, and battery expiration/internal shorts. Customer may choose 40 GB Solid State memory or 320 GB hard drive.
	The DVR shall also include: An option to display speed, heading, and GPS location The ability to individually adjust a video channel's contrast and color Must use motion jpeg (mjpeg) compression Have a built-in voltage regulator to prevent damage to the DVR Capable of multiple resolutions to allow for control of hard disk usage while recording	Additional features and information: Advanced .H264 compression is implemented for brighter colors, and increased picture quality.
3.1.3	Maintenance and Software Upgrades: The manufacture will provide automatic software upgrades at no additional cost for the life of the contract. The bidder will provide a toll free contact information for technical support.	Compliant
3.1.4	Installation: The bidder will supply the installation of all hardware (including accessories, cables, harness, etc.) and software to guarantee systems are fully functional and operational accepted by the agency and prior to submittal of invoice.	Compliant
	The bidder will provide installation, testing and start-up within 60 days after receipt of order. Each unit shall be tested for proper operation for each DVR system.	Compliant
	The bidder will provide no less than 2 (two) dedicated technical support and/or installers for this project and could be utilized by all 55 counties. Technical support shall be available from 8:00 A.M. to 5:00 P.M., Monday through Friday. Installers shall respond to installation call or service call within 48 hours. There shall be no charge for this service, during the life of the contract.	Additional features and information (to service cal requirement): On-site service calls will be billed to the district. A full parts and labor warranty is provided.
	The bidder shall supply complete user training on the system and installation. This will include cortication on the installation. The training will be for two (2) people/ per county and should include eight (8) hours of training per county (not unit purchased).	Compliant

3.1.5	The bidder will provide a toll free engineering support line and offer technical support at no charge, during the warranty period.	Compliant
	The system must be designed and supported by the manufacturer. The bidder must have experience installing and servicing mobile video surveillance systems on school buses.	Compliant
	The bidder submitting the bids shall be authorized to sell and service the equipment covered under this contract. The bidder must provide collaborating evidence that they are authorized by the manufacturer to sell and service equipment being bid.	Compliant
3.1.6	Warranty: The bidder must offer a three (3) year limited parts and labor and warranty on the cameras. Installation shall have an unlimited warranty.	Compliant
	The bidder must supply extended warranty options	Compliant
	The bidder should supply all warranty information on the system in their bid response, or upon request for evaluation purposes.	Compliant
	The bidder must be authorized by the manufacturer to repair the equipment during the warranty period, if the warranty repairs are to be performed by the bidder.	Compliant

Phase 1 - Project Kick-Off and Documentation Phase

Once 'notice to proceed' is granted by State of West Virginia, a project kick-off meeting will be scheduled as soon as possible. During the project kick-off meeting, project expectations and requirements will be verified by both parties; project milestones, test phases, and system configuration will also be discussed and planned.

During week 2 of the project, Seon engineers will begin drafting the 'System Design Document.' Generally, the System Design Document describes the system requirements, operating environment, system and subsystem architecture, database design, schematics, and includes a written description describing the project as a whole.

When the System Design Document is complete, State of West Virginia will be expected to review and formally approve the instrument. If State of West Virginia has any additional recommendations, or wishes to alter the document, these changes will be made and State of West Virginia will be required to provide notice to proceed to the next project phase.

Once product begins arriving onsite, installation planning will commence; shortly after, installation will begin. Seon is flexible in regard to how the installation is carried out, but recommends buses are delivered in groups to facilitate a streamlined installation method. Installing DVRs in groups allows us to track any potential installation errors before they spread into the entire fleet, increasing the overall installation time.

Brief hardware and software training will take place at the beginning of the project to ensure State of West Virginia employees are comfortable using the TL4 and navigating the software.

As depicted in the project timeline, the optional wireless infrastructure installation has been scheduled in sync with the bus installation to expedite the project.

On a daily basis, 'Bus Acceptance Sheets' for installations that were completed that day will be submitted to State of West Virginia Project Manager is expected to sign-off and approve every completed bus. As-built documentation, including vehicle schematics, will be provided to State of West Virginia at the end of the installation project for reference.

Installation - Best Practices

A pre-installation vehicle inspection will be scheduled, and State of West Virginia will be informed of any issues. Every connection to a vehicle will be properly testing with a multi-meter. Only after the proper voltage and/or switch level has been verified shall any connection be made.

All wire connections will be solid, permanent, and conform to standard communications best practices. Equipment, electrical connections, and wiring shall be protected and concealed from view. Seon will install the TL4 DVRs so they are secure and tamperproof; in the unlikely event of vehicle damage caused by Seon installers, Seon will correct any deficiencies at its own expense.

Installation

Both hardware and software training will take place at different points during the installation project. Training directed towards both technical understanding and system usage generally takes place during the final week of product installation; however, as previously described, brief introductory training will occur at the beginning of the installation project. Training will take place in groups or in one session for all interested parties; Seon's main concern is that all persons using the equipment are familiar with its inner workings, and are both confident and competent in minor troubleshooting.

In-depth training occurs near the end of installation, and typically follows the schedule located on the following page.

Training Methodology & Schedule

Category	Location	Description	Duration
Software training & hardware training	On-site	Basic overview of vMax software. On-board DVR programming is also covered; system diagnostics overview; removal and replacement of the HDD will also be covered.	2 hours
Engineering services & IT training	On-site	Optional Wi-Fi installation process is explained and reviewed. Access point configuration is demonstrated and reviewed (including mobile bridge).	2 hours
		Seon engineers will consult with IT personnel during this phase to ensure that Seon training and demonstrations address the needs of the State of West Virginia.	
Engineering services software training	On-site	Optional vMax Commander software installation, commissioning, and comprehensive training session.	2 sessions – 4 hours.

Depending on the complexity of the installed system, further training pertaining to organizational structure, usage, and video management will be determined on a case by case basis. Follow-up training is always available to State of West Virginia and can be accomplished via webinar or on-site visit; training manuals, both electronic (.pdf file) and hard copies, will be provided at no additional cost. The manuals are clear, easy to understand, and play an integral part in

Project Management

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conveying how Seon systems work as a whole. Additionally, Seon will supply hard copies of technical specifications to State of West Virginia as well as information pertaining to maintenance and general system up-keep.

Depending on user needs, Seon employs raw materials, interactive media, and clear diagrams during training sessions to satisfy varied learning styles.

Seon has extensive experience in training groups of all sizes and different skill levels; Seon training topics include information about:

- CCTV specification, design, and principles
- · Hardware and software installation
- Hardware and software system overview
- General system usage
- Full software training

EDD388676 - Pricing Page

		А	В	С	D	Ε
Items	Description	Range for Volume Pricing	Estimated Qty. Per County Order	# of ordering Counties	Unit Price	Extended Price
NO.	Description	Tricing	rer county order		Omerrice	Exterior Fried
	Complete Stop Arm Digital Video Recording System, installed, tested and training. With 3 year limited parts and labor warranty.	1	1	20	\$1,545.00	\$30,900.00
	Complete Stop Arm Digital Video Recording System, installed, tested and training. With 3 year limited parts and labor warranty.	2 to 4	3	20	\$1,545.00	\$92,700.00
3	Complete Stop Arm Digital Video Recording System, installed, tested and training. With 3 year limited parts and labor warranty.	5 to 10	5	9	\$1,545.00	\$69,525.00
4	Complete Stop Arm Digital Video Recording System, installed, tested and training. With 3 year limited parts and labor warranty.	11 or more	12	1	\$1,508.00	\$18,096.00
					GRAND TOTAL COST:	\$211,221.00
5	OPTIONAL: Extended Warranty Options				\$170.00	
	Listed estimated quantities are approximated contract is guaranteed or implied. The bid shall be evaluated by multipling Counties X Unit Price = Extended Price(I	the Estimated Qu BxCxD=E). Warr	nantity per Count anty option(s) wi	y Order by ill not be in	the Number of Order	ing tion.
	The award is based on the lowest repso	nible bidder meet	ting specification	<u> </u>	I	T
	Failure to use this form may I	result in disqualifi	cation			

Service and Support

Our technical support team provides award-winning service via a highly specialized network that includes self-service online tools, global service providers, and dedicated call centers. Our goal is to give State of West Virginia the best technical support and advice possible.

Seon's solutions are customized to meet the specific needs of each client, and our products are serviced by a team of dedicated specialists. Should State of West Virginia partner with Seon, our experts are available ondemand to handle every aspect of the installation and support process.

Our in-house team of experts understands the multifaceted nature of each Seon product and is extensively trained in third-party technologies.

Whenever you contact our support staff, you will speak to a fully trained employee – not a call taker based in an overseas call centre.

The technical support team provides ongoing support to Seon clients over the life of the product; the product and technical support team's responsibilities include:

- Management of web-based tools for training and troubleshooting
- Field support services including installation, training, and troubleshooting services
- Product repairs for both warranty and out-ofwarranty products

We pride ourselves on unparalleled support and customer service! All repair and in-house technicians handle service work, and all service records are logged and summarized for analysis; service record analysis enables us to efficiently identify any *common* system issue(s) or reasons for failure, and then quickly correct these potential obstacles.

"Along with superior camera systems, Seon also provides excellent customer service. The support team is just a phone call away, and their sales reps always make sure our needs are met. Our experience with Seon has been nothing less than satisfying."

-Kenneth Morosko Fleet Transit Supervisor

"Our Seon representative has always been knowledgeable, available, and there to help whenever needed. Seon does not forget you once they make the sale. I have recommended Seon to many colleagues in the U.S. – from those who have taken my recommendation, I have yet to hear a complaint."

-Jack G. Shelton Executive Director of Transportation

Warranty Information

Seon Systems Sales

Seon Systems Sales (Seon) warrants the cameras and components listed below against defects in workmanship and materials provided that such defects appear or are discovered within the respective periods specified below and provided further that the purchaser of such products notifies Seon of such defects within thirty (30) days of the appearance or discovery of such defects:

- Three (3) years from date of purchase parts and labour on the CQ Dome Camera Series
- Three (3) years from date of purchase parts and labour on all IR Illuminator Cameras
- Three (3) years from date of purchase parts and labour on the TL4 Mobile DVR Systems
- One (1) year from date of purchase all wireless infrastructure components.

All service/replacement parts and repairs are warranted for a period of 90 days.

Subject to the terms and conditions listed below, during the relevant warranty period, Seon will repair, replace, or refund the purchase price for the defective product, whichever Seon considers to be appropriate in the circumstances, in Seon's sole and arbitrary opinion, free of charge, any defective products returned prepaid. In the event purchaser has a problem with any Seon product, please call and request a RETURN AUTHORIZATION (RA) NUMBER from the Service Department. Please call 877-630-7366 or (604) 941-0880 and ask for the Service Department. Be sure to have the model number, serial number and the nature of the problem available for the customer service representative. Prior authorization MUST be obtained for all returns, exchanges, or credits. ITEMS SHIPPED TO SEON WITHOUT A CLEARLY IDENTIFIED RA NUMBER MAY BE REFUSED.

Products returned will be tested to verify the defect. Upon verification of the defect, the product will be repaired or exchanged, or the purchase price will be refunded or credited to the customer's account, at the sole option of Seon. In the event of replacement, the returned product will be credited to the customer's account and a new invoice issued for the replacement item. Seon reserves the right to refund the purchase price or to issue a credit only in lieu of replacement. Seon may use new or refurbished replacement parts for repairing its products, at its sole and arbitrary discretion. Seon may replace an entire unit with an equivalent model, at its sole and arbitrary discretion. If a unit is exchanged, the

returned product shall become the property of Seon and the exchange product becomes the property of the purchaser, and the remainder of the warranty that applied to the original unit purchased shall apply to the exchanged product. Exchange units may be new units, or units that have been repaired to full factory specifications, at Seon's discretion. If the product is found to be in good working order or its inability to function properly is not covered by this warranty, the product will be returned in the same condition as received unless repair is possible and requested by the customer. Repairs of such nature will incur a charge for parts and labour and will proceed only by agreement with the customer to accept the charge.

This warranty shall not apply:

- (a) to equipment not supplied by Seon;
- (b) to equipment, including, any components, which shall have been operated in excess of rated capacity, subject to negligence, accident, or damage by circumstances beyond Seon's control, or to improper installation, operation, maintenance, servicing, alterations or storage, modification without Seon's written authorization, misuse, vandalism, fire, floods or acts of nature so as, in Seon's exclusive and arbitrary judgment, to affect the same adversely;
- (c) If the serial number for the product has been altered in any way; or
- (d) If the product has been operated outside of the specified Operating Environment specified in the Seon Users Manual for such product

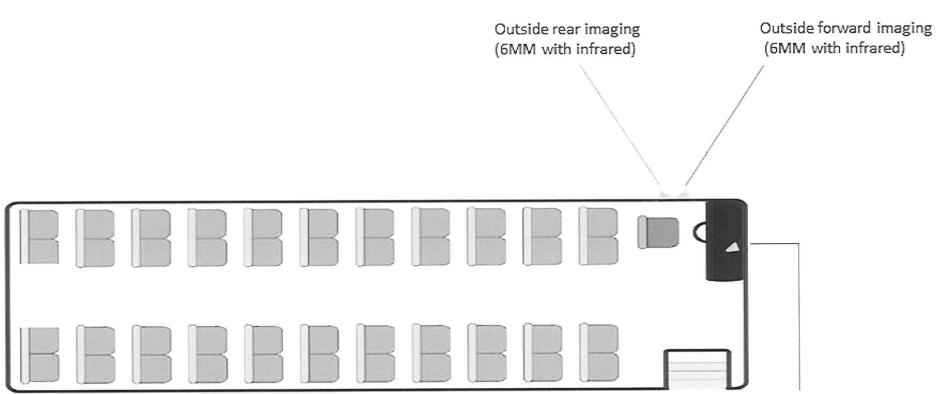
Seon Systems Sales State of West Virginia RFQ- EDD388676



"Stop arm camera placement and lens sizes" for West Virginia DOE

EACH KIT TO CONTAIN:

- 1 TS41P20H320G/S40G
- 1 WT1D20S20G4
- 2 CA906EI20
- 1-CJ803A1
- 1-ET-STB
- 1-INSTALL



Dash area mount (3MM)
Stop arm deployment, additional driver and vehicle imaging, front of bus.



Seon Design Inc. ® Product Warranty

Seon Design Inc. (Seon) warrants the cameras and components listed below against defects in workmanship and materials provided that such defects appear or are discovered within the respective periods specified below and provided further that the purchaser of such products notifies Seon of such defects within thirty (30) days of the appearance or discovery of such defects:

- Three (3) years from date of purchase, parts and labor on all Cameras
- Three (3) years from date of purchase, parts and labor on the Explorer® Premier, DX, TX, EX, MX, and Trooper® TL series mobile DVR Systems
- One (1) year from date of purchase, parts and labor on the Smart Reach® Wireless systems and other Wireless products
- One (1) year from date of purchase, parts and labor on the VML Controller and other vMax Live Plus hardware products
- One (1) year from date of purchase, parts and labor on all other products and accessories

All service/replacement parts and repairs are warranted for a period of 90 days.

Subject to the terms and conditions listed below, during the relevant warranty period, Seon will repair, replace, or refund the purchase price for the defective product, whichever Seon considers to be appropriate in the circumstances, in Seon's sole and arbitrary opinion, free of charge, any defective products returned prepaid. In the event purchaser has a problem with any Seon product, please call and request a RETURN AUTHORIZATION (RA) NUMBER from the Service Department. Please call 877-630-7366 or (604) 941-0880 and ask for the Service Department. Be sure to have the model number, serial number and the nature of the problem available for the customer service representative. Prior authorization MUST be obtained for all returns, exchanges, or credits. ITEMS SHIPPED TO SEON WITHOUT A CLEARLY IDENTIFIED RA NUMBER MAY BE REFUSED.

Products returned will be tested to verify the defect. Upon verification of the defect, the product will be repaired or exchanged, or the purchase price will be refunded or credited to the customer's account, at the sole option of Seon. In the event of replacement, the returned product will be credited to the customer's account and a new invoice issued for the replacement item. Seon reserves the right to refund the purchase price or to issue a credit only in lieu of replacement. Seon may use new or refurbished replacement parts for repairing its products, at its sole and arbitrary discretion. Seon may replace an entire unit with an equivalent model, at its sole and arbitrary discretion. If a unit is exchanged, the returned product shall become the property of Seon and the exchange product becomes the property of the purchaser, and the remainder of the warranty that applied to the original unit purchased shall apply to the exchanged product. Exchange units may be new units, or units that have been repaired to full factory specifications, at Seon's discretion. If the product is found to be in good working order or its inability to function properly is not covered by this warranty, the product will be returned in the same condition as received unless repair is possible and requested by the customer. Repairs of such nature will incur a charge for parts and labor and will proceed only by agreement with the customer to accept the charge.

This warranty shall not apply:

- (a) to equipment not supplied by Seon;
- (b) to equipment, including, any components, which shall have been operated in excess of rated capacity, subject to negligence, accident, or damage by circumstances beyond Seon's control, or to improper installation, operation, maintenance, servicing, alterations or storage, modification without Seon's written authorization, misuse, vandalism, fire, floods or acts of nature so as, in Seon's exclusive and arbitrary judgment, to affect the same adversely:
- (c) if the serial number for the product has been altered in any way; or
- (d) if the product has been operated outside of the specified Operating Environment specified in the Seon Users Manual for such product.





Disclaimer

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATIONS, WARRANTIES, GUARANTEES AND CONDITIONS, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE AND WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, SEON EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY, DURABILITY OR FITNESS FOR PURPOSE AND ANY WARRANTIES OR MODIFIED WARRANTIES ARISING FROM USAGE OF TRADE OR COURSE OF DEALING.

Any description of the goods or services, whether in writing or made orally by Seon or Seon's agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with customer's order are for the sole purpose of identifying the goods and/or services and shall not be construed as an express warranty. Any suggestions by Seon or Seon's agents regarding use, applications or suitability of the goods and/or services shall not be construed as an express warranty unless confirmed to be such in writing by Seon. Purchaser assumes full responsibility for selecting products to achieve purchaser's intended purposes, for properly installing and using those products, and for verifying the results obtained therefrom.

PURCHASER'S EXCLUSIVE REMEDY AND SEON'S ENTIRE LIABILITY ARISING FROM OR IN CONNECTION WITH PURCHASER'S USE OF THE PRODUCTS AND/OR THIS AGREEMENT SHALL BE REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS, OR REFUND OR CREDIT OF THE PURCHASE PRICE OF THE PRODUCTS AS SET FORTH ABOVE. SEON SHALL NOT BE SUBJECT TO AND DISCLAIMS: (A) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (B) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE, AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO GOODS SOLD OR SERVICES RENDERED BY SEON, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (C) ALL CONSEQUENTIAL, INCIDENTAL, SPECIAL AND CONTINGENT DAMAGES WHATSOEVER, EVEN IF SEON HAS BEEN SPECIFICALLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Without limiting the generality of the foregoing, Seon specifically disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits or revenues, loss of use of goods or any associated equipment, cost of capital, cost of substitute goods, facilities or services, down-time, shut-down or slow-down costs, or for any other types of economic loss, and for claims of customer's customers or any third party for any such damages. Some jurisdictions do not allow limitation or exclusion of incidental or consequential damages, so this limitation or exclusion may not apply to purchaser. In no event shall Seon's total liability for any damages to purchaser or any other person in connection with the products or this agreement exceed the lower of the suggested list price or the actual price paid for the products, regardless of whether such liability arises from contract, tort, warranty or any other form of claim. If any provision of this agreement is found to be void, invalid, or unenforceable, that finding shall not affect the remaining provisions, all of which shall be enforced to the full extent permitted by law. If any remedy hereunder is determined to have failed of its essential purpose, the limitations of liability and exclusion of damages set forth above shall remain in full force and effect. This agreement may be modified only by a writing signed by a duly authorized representative of Seon.

Provisions Applicable to American Customers

For those customers whose mailing address is in the United States, Seon's offer and any agreement of sale resulting therefrom shall be governed by and construed in accordance with the internal and domestic laws of the State of WASHINGTON without giving effect to the conflict of laws rules thereof. The Superior Court of Washington for Whatcom County and U.S. District Court for the Western District of Washington ("the U.S. Closed Courts") shall have exclusive jurisdiction to entertain and determine all disputes and claims, whether for specific performance, injunction, declaration or otherwise arising out of or in any way connected with the construction, breach, or alleged, threatened or anticipated breach of the contract resulting from this offer and shall have jurisdiction to hear and determine all questions as to the validity, existence or enforceability thereof. Customer specifically consents to such Court's exercise of jurisdiction over it. The purchaser attorns to the exclusive jurisdictions of the jurisdiction of the U.S. Closed Courts, waives any obligation to venue in any action or proceeding regarding Seon Products and waives any objection that the U.S. Closed Courts are an inconvenient forum or do not have jurisdiction over the purchaser of Seon. The United Nations Convention On Contracts For The International Sale Of Goods shall not apply.



Disclaimer

Provisions Applicable to Canadian Customers

For those customers whose mailing address is in Canada, Seon's offer and any agreement of sale resulting therefrom shall be governed by and construed in accordance with the internal and domestic laws of the Province of BRITISH COLUMBIA and the laws of Canada applicable therein without giving effect to the conflict of laws rules thereof. The courts of British Columbia (the "Canadian Closed Courts") shall have exclusive jurisdiction to entertain and determine all disputes and claims, whether for specific performance, injunction, declaration or otherwise arising out of or in any way connected with the construction, breach, or alleged, threatened or anticipated breach of the contract resulting from this offer and shall have jurisdiction to hear and determine all questions as to the validity, existence or enforceability thereof. The purchaser attorns to the exclusive jurisdictions of the jurisdiction of the Canadian Closed Courts, waives any obligation to venue in any action or proceeding regarding Seon Products and waives any objection that the Canadian Closed Courts are an inconvenient forum or do not have jurisdiction over the purchaser of Seon. The United Nations Convention On Contracts For The International Sale Of Goods shall not apply.

The information contained herein is subject to change without notice.

Extended Warranty for Certain Products

The following extended warranty ("Extended Warranty") provisions apply to the products ("Extended Warranty Products") listed in the attached Schedule A if the purchaser thereof has purchased the Extended Warranty from Seon. If any provisions of the Extended Warranty conflict or are inconsistent with the provisions of the basic warranty set forth above, the provisions of the Extended Warranty shall govern.

Seon warrants the Extended Warranty Products against defects in workmanship and materials provided that such defects appear or are discovered within the extended warranty period set forth in Schedule A for the relevant Extended Warranty Product and provided further that the purchaser of such products notifies Seon of such defects within 30 days of the appearance or discovery of such defects.

Under the Extended Warranty:

- (a) Seon will provide repairs to the Extended Warranty Product at no extra charge during the Extended Warranty period;
- (b) normal wear and tear IS covered, including replacement of hard drives if necessary;
- (c) the parts and labor required to complete all warranted repairs are included;
- (d) Seon will arrange and pay the cost of ground freight between Seon's service facilities in Blaine, Washington, U.S.A. (or such other location as may be designated by Seon) and purchaser's location; and
- (e) Seon will pay freight, brokerage and duty costs to bring the goods to Canada, if required, in the sole and arbitrary opinion of Seon.

In addition to the telephone numbers provided above for reporting a warranty matter, purchasers of Extended Warranty products may report warranty matters by e-mail to Seon at: service@seon.com.

The purchaser reporting an Extended Warranty issue may request Seon to arrange for pick up of the Extended Warranty Products and shall provide information as to the number of parcels and shall request a RETURN AUTHORIZATION (RA) NUMBER.

Seon will only be responsible for the cost of ground freight. Any additional costs for express modes of freight will be paid by the purchaser of the Extended Warranty Product. Advance replacements will not be provided.

A renewal or extension of the Extended Warranty is not automatic and will only be offered at the sole discretion of Seon and must be verified by Seon in writing.

REQUEST FOR QUOTATION EDD388676 Stop Arm Violation Digital Video Recorder System

- 7.3 Reports: Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 7.4 Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: __Darrin Wilson _______
Telephone Number: __434-316-3860 ______
Fax Number: __866-664-3677 ______
Email Address: _dwilson@seon.com _______

EDD388676 - Pricing Page

Bidder / Ve	endor Inform	lation:	
Name:	Seon Sy	estems Sales	
Address:	_Unit 111	-3B Burbidge Street	
	Coquitle	m, BC V3K-7B2, Canada	
Phone #:		877-630-7366	
Fax#:		866-664-3677	_
Email Add	ress:	dwilson@seon.com	_
Authorized	d Signature:		X
		nformation :	-
		nformation :	
Contact Co	Darrin 3310 C	oformation : Wilson Mayflower	
Contact Co	Darrin 3310 C	Mayflower urg, VA 24503, USA	
Contact Co	Darrin 3310 C	oformation : Wilson Mayflower	
Contact Co Name: Address:	Darrin 3310 C	Mayflower urg, VA 24503, USA	
Contact Contac	Darrin 1 3310 C Lynchb	Mayflower urg, VA 24503, USA 434-316-3860	
Contact Contac	Darrin 1 3310 C Lynchb	Mayflower urg, VA 24503, USA 434-316-3860 434-382-0676	

Rev. 07/12

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with West Virginia Code, §5A-3-37. (Does not apply to construction contracts). West Virginia Code, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the West Virginia Code. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1,	Ing the date of this certification; or, Bidder is a partnership, association or corporation re business continuously in West Virginia for four (4) y ownership interest of Bidder is held by another indiv maintained its headquarters or principal place of b preceding the date of this certification; or, Bidder is a population of the preceding the date of the certification; or,	led continuous sident vendor a ears immediat idual, partners ousiness continuor or subsidiary w ipal place of bu	the reason checked: ly in West Virginia for four (4) years immediately preced- and has maintained its headquarters or principal place of ely preceding the date of this certification; or 80% of the hip, association or corporation resident vendor who has nuously in West Virginia for four (4) years immediately which employs a minimum of one hundred state residents usiness within West Virginia continuously for the four (4)
2.	Application is made for 2.5% resident vendor properties a resident vendor who certifies that, duri	oreference for	the reason checked: ne contract, on average at least 75% of the employees o have resided in the state continuously for the two years
3.	affiliate or subsidiary which maintains its headqua	um of one hur irters or princip fies that, durin aployees are re	Idred state residents or is a nonresident vendor with an pal place of business within West Virginia employing a g the life of the contract, on average at least 75% of the esidents of West Virginia who have resided in the state
4.	Application is made for 5% resident vendor pro Bidder meets either the requirement of both subdiv	eference for t isions (1) and (he reason checked: (2) or subdivision (1) and (3) as stated above; or,
5,	Application is made for 3.5% resident vendor p Bidder is an individual resident vendor who is a veter and has resided in West Virginia continuously for submitted; or,	oreference wh an of the United r the four year	no is a veteran for the reason checked: d States armed forces, the reserves or the National Guard rs immediately preceding the date on which the bid is
6.	purposes of producing or distributing the commoditi	United States les or completi n average at le	armed forces, the reserves or the National Guard, it, tor ng the project which is the subject of the vendor's bid and ast seventy-five percent of the vendor's employees are
7.	dance with West Virginia Code \$5A-3-59 and V	Vest Virginia (l, women- and minority-owned business, in accor- Code of State Rules. I by the Purchasing Division as a certified small, women-
require agains	ements for such preference, the Secretary may order	the Director of old amount and	receiving preference has failed to continue to meet the f Purchasing to: (a) reject the bid; or (b) assess a penalty of that such penalty will be paid to the contracting agency
author the red deeme	izes the Department of Revenue to disclose to the Dire quired business taxes, provided that such information ed by the Tax Commissioner to be confidential.	ector of Purcha n does not con	ly requested information to the Purchasing Division and sing appropriate information verifying that Bidder has paid tain the amounts of taxes paid nor any other information
and a	r penalty of law for false swearing (West Virginia ccurate in all respects; and that if a contract is i jes during the term of the contract, Bidder will n	ssued to Bid	3), Bidder hereby certifies that this certificate is true der and if anything contained within this certificate chasing Division in writing immediately.
Bidde	seon Systems Sales	Signed:	N/A
Date	February 26, 2013	Title:	N/A

February 26, 2013

WV-96A Rev. 12/12

AGREEMENT ADDENDUM FOR SOFTWARE

In the event of conflict between this addendum and the agreement, this addendum shall control:

- DISPUTES Any references in the agreement to arbitration or to the jurisdiction of any court are hereby deleted. Disputes arising out of the agreement shall be presented to the West Virginia Court of Claims.
- 2. HOLD HARMILESS Any provision requiring the Agency to indemnify or hold harmless any party is hereby deleted in its entirety.
- 3. GOVERNING LAW The agreement shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law.
- 4. TAXES Provisions in the agreement requiring the Agency to pay taxes are deleted. As a State entity, the Agency is exempt from Federal, State, and local taxes and will not pay taxes for any Vendor including individuals, nor will the Agency file any tax returns or reports on behalf of Vendor or any other party.
- 5. PAYMENT Any references to prepayment are deleted. Fees for software licenses, subscriptions, or maintenance are payable annually in advance. Payment for services will be in arrears.
- 6. INTEREST Any provision for interest or charges on late payments is deleted. The Agency has no statutory authority to pay interest or late fees.
- 7. NO WAIVER Any language in the agreement requiring the Agency to waive any rights, claims or defenses is hereby deleted.
- 8. FISCAL YEAR FUNDING Service performed under the agreement may be continued in succeeding fiscal years for the term of the agreement, contingent upon funds being appropriated by the Legislature or otherwise being available for this service. In the event funds are not appropriated or otherwise available for this service, the agreement shall terminate without penalty on June 30. After that date, the agreement becomes of no effect and is null and void. However, the Agency agrees to use its best efforts to have the amounts contemplated under the agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default.
- STATUTE OF LIMITATION Any clauses limiting the time in which the Agency may bring suit against the Vendor, lessor, individual, or any
 other party are deleted.
- SIMILAR SERVICES Any provisions limiting the Agency's right to obtain similar services or equipment in the event of default or non-funding during the term of the agreement are hereby deleted.
- 11. FEES OR COSTS The Agency recognizes an obligation to pay attorney's fees or costs only when assessed by a court of competent jurisdiction. Any other provision is invalid and considered null and void.
- ASSIGNMENT Notwithstanding any clause to the contrary, the Agency reserves the right to assign the agreement to another State of West Virginia agency, board or commission upon thirty (30) days written notice to the Vendor and Vendor shall obtain the written consent of Agency prior to assigning the agreement.
- 13. <u>LIMITATION OF LIABILITY</u> The Agency, as a State entity, cannot agree to assume the potential liability of a Vendor. Accordingly, any provision in the agreement limiting the Vendor's liability for direct damages is hereby deleted. Vendor's liability under the agreement shall not exceed three times the total value of the agreement. Limitations on special, incidental or consequential damages are acceptable. In addition, any limitation is null and void to the extent that it precludes any action for injury to persons or for damages to personal property.
- 14. <u>RIGHT TO TERMINATE</u> Agency shall have the right to terminate the agreement upon thirty (30) days written notice to Vendor. Agency agrees to pay Vendor for services rendered or goods received prior to the effective date of termination. In such event, Agency will not be entitled to a refund of any software license, subscription or maintenance fees paid.
- 15. TERMINATION CHARGES Any provision requiring the Agency to pay a fixed amount or liquidated damages upon termination of the agreement is hereby deleted. The Agency may only agree to reimburse a Vendor for actual costs incurred or losses sustained during the current fiscal year due to wrongful termination by the Agency prior to the end of any current agreement term.
- 16. RENEWAL Any reference to automatic renewal is deleted. The agreement may be renewed only upon mutual written agreement of the parties.
- 17. INSURANCE Any provision requiring the Agency to purchase insurance for Vendor's property is deleted. The State of West Virginia is insured through the Board of Risk and Insurance Management, and will provide a certificate of property insurance upon request.
- 18. RIGHT TO NOTICE Any provision for repossession of equipment without notice is hereby deleted. However, the Agency does recognize a right of repossession with notice.
- 19. ACCELERATION Any reference to acceleration of payments in the event of default or non-funding is hereby deleted.
- 20. CONFIDENTIALITY Any provision regarding confidentiality of the terms and conditions of the agreement is hereby deleted. State contracts are public records under the West Virginia Freedom of Information Act.
- 21. AMENDALENTS All amendments, modifications, alterations or changes to the agreement shall be in writing and signed by both parties. No amendment, modification, alteration or change may be made to this addendum without the express written approval of the Purchasing Division and the Attorney General.

ACCEPTED BY:	lack
STATE OF WEST VIRGINIA	<u>vendor</u>
Spending Unit:	Company Name? Seon Systems Sales
Signed:	Signed.
Title:	Offitle:
Date:	Date: February 26, 2013



TITLE

RFQ COPY

TYPE NAME/ADDRESS HERE

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

Solicitation ____

NUMBER	
EDD388676	. 1

····P	VGE

CONNIE OSWALD 304-558-2157

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ADDRESS CHANGES TO BE NOTED ABOVE

DEPARTMENT OF EDUCATION VARIOUS LOCALES AS INDICATED BY ORDER

DATE PRINTED 02/13/2013 BID OPENING DATE: OPENING TIME 1:30PM 02/28/ CAT. AMOUNT QUANTITY UOP ITEM NUMBER UNIT PRICE LINE ADDENDUM NO. 1 TO PROVIDE ANSWERS TO QUESTIONS RECEIVED FOR THIS SOLICITATION TO PROVIDE ADDENDUM ACKNOWLEDGMENT. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID. OF ADDENDUM NO. END TELEPHONE DATE SIGNATURE

FEIN

SOLICITATION NUMBER: EDD388676 Addendum Number: 01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum	Category:
---------------------	-----------

1	1	Modify bid opening date and time					
[1	Modify specifications of product or service being sought					
[🗸]		Attachment of vendor questions and responses					
[1	Attachment of pre-bid sign-in sheet					
[J	Correction of error					
I	l	Other					

Description of Modification to Solicitation:

- 1. To provide answers to questions received.
- 2. To provide addendum acknowledgment.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment Λ and is specifically incorporated herein by reference.

Terms and Conditions:

- All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

EDD388676

Questions & Responses

1Q. Do you know what kind of buses the equipment will be put on? This makes a difference size of the boxes.						
4.0						
1R.	Thomas, Blue Bird and IC					
2Q.	Are these going on only new buses or existing fleets in the school districts?					
	Both new and existing					
2R.	Both new and existing					
3Q.	Will the orders be coming directly from the state for all of the counties, or will each county					
	order their own units?					
3R.	Counties will order individually					
4Q.	Under General Requirements Paragraph 3.1.1you state that the mounting plate must be installed on the entire fleet so it can be moved from bus to bus. We will need to know how many buses are located in each county so we can determine how many plates are needed for each county.					
4R.	Mounting plates will only be provided initially for the systems purchased, any other plates will be provided on an as needed basis.					
5Q.	Paragraph 3.1.1You state that it must be capable of capturing the license plate and offending driver in the dark. This depends on several thingshow far away the car is, how strong the lights are on the license plate area, which determines whether it washes out the video or not. There could also be an issue of the tint on the window and the angle. What I am saying is that this specification might not be 100%. All the time.					
5R.	This is understood.					
6Q.	Paragraph 3.1.4 It might be tough to build, install and train all units within a 60 day period. Is this flexible? The situation that could be an issue is the brand of buses. If we do not know this in advance, we would not be able to inventory the necessary parts because they are different for each brand. Starting from scratch usually takes 6-8 weeks for manufacturing and assembly. This doesn't include the installation and training. In order to calculate installation correctly, we would need to know the number of buses in each fleet so we can determine the number of plates that would need installed.					
6R.	The orders from the counties will not come in all at once due to delivery of the new buses.					
7Q.	Can we have multiple counties attend training sessions at the same time?					
7R.	Yes					
8Q.	On the pricing page, the number of units add up to 137 units. You state in another part that there are 225 buses ordered per year.					
	It is an estimate only.					

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: EDD388676

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[]	/]	Addendum No. 1	[]	Addendum No. 6
]]	Addendum No. 2	[]	Addendum No. 7
]]	Addendum No. 3	[]	Addendum No. 8
]]	Addendum No. 4]]	Addendum No. 9
ſ	1	Addendum No. 5	ſ	1	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Seon Systems Sales

Company

Authorizett Signature

February 26, 2013
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Seon Systems Sales

(Company)

(Authorized Signature)

(Representative Name, Title)

877-630-7366

(Phone Number)

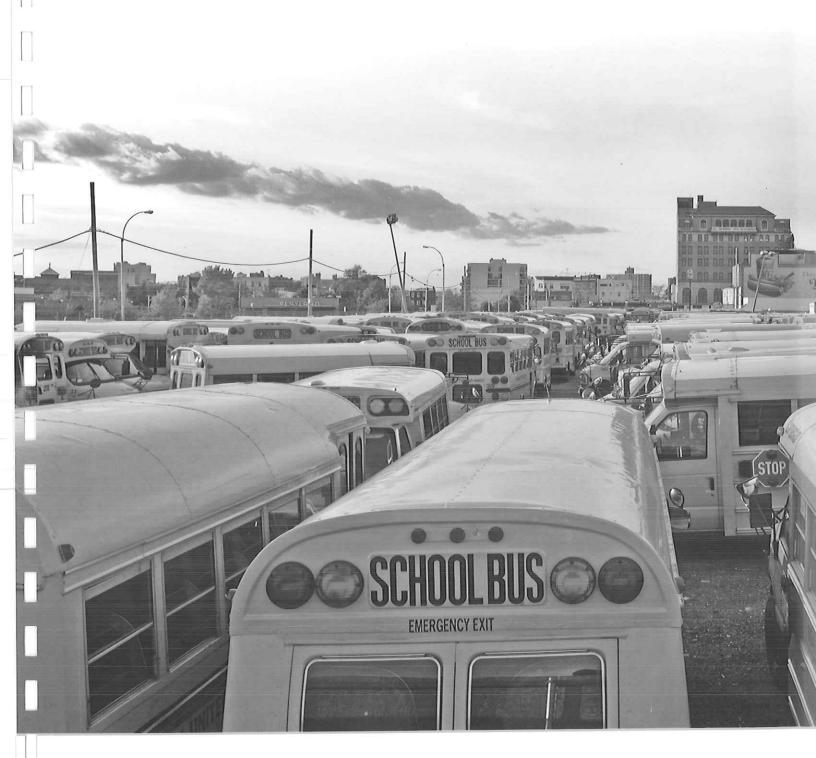
(Fax Number)

February 26, 2013

(Date)

Fleet Management and Surveillance Solutions for Student Transportation

School Bus Product Catalog 2012





Challenges of School Bus Transportation

Student safety, incident management, risk reduction, and financial limitations — school bus transportation administrators face many issues, and Seon's fleet management and mobile surveillance products can help.

Fleet management and mobile surveillance systems promote a safe environment for both students and employees. They deter bullying and crime, identify security threats and reduce false injury claims. They assist with parental concerns or complaints, insurance issues, liability defense and effective litigation. Surveillance systems can also assist with escalating fuel and maintenance costs, ensuring that drivers maintain good driving practices and stay on designated routes. Surveillance video footage is used to train drivers in real-life scenarios.

Seon's fleet management solutions increase the safety of passengers and drivers by ensuring that fleet managers know where school buses are located in real-time. Fleet managers are able to address operational issues quickly and efficiently, therefore increasing student and employee safety, reducing risk, and saving money.

With so many benefits, school districts that invest in fleet management and mobile surveillance solutions quickly realize a calculable return on investment.

Choosing the best mobile surveillance solution

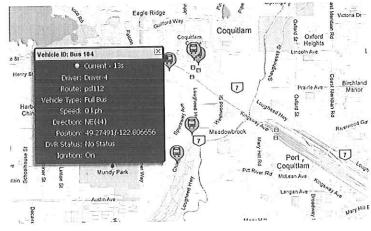
Since 1999 Seon Design Inc. has created video surveillance solutions specifically for mobile applications. Seon's premium quality mobile video surveillance products and unwavering commitment to service have made Seon the partner of choice for school districts across North America. In fact, independent UK-based firm IMS Research has identified Seon as the mobile video surveillance industry's global leader.*

Seon's core strength lies in our ability to remain flexible and adapt to the individual needs of school bus fleets large and small. Our systems are dependable, user-friendly, tamper-proof and tough, capable of withstanding vibration, temperature extremes and all the rigors of mobile environments. Seon solutions are also cost-effective, offering outstanding value in the market today.

With our leading-edge customer service and responsive technical support team, Seon's dedication to customer satisfaction is unparalleled in the mobile surveillance industry. We stand behind our products, forging lasting relationships built on the sound investment that Seon clients enjoy year after year. Seon products are also designed, manufactured and serviced right here in North America.

¹³ The World Market for Mobile Video Surveillance Equipment, IMS Research, 2007, 2009, 2011.







Choose Seon

- · Partner with a safe, well-established company.
- · Promote a safe environment for children and drivers.
- Protect assets and school property from theft and vandalism.
- · Realize a calculable return on investment.
- Relax knowing you are working with the industry leader (one out of every two systems sold is a Seon system).
- Enjoy unparalleled customer service and responsive technical support.
- Purchase with lease financing.



Security, Safety & Control™

At Seon, we believe in security, safety, and control. As technology changes, it is reassuring to know that Seon designs leading-edge solutions that are also easy to install and use.

Security: Our solutions give you the security of knowing what really happened at an incident, the security of litigation prevention, and the security of purchasing from the clear market leader with the best customer support in the industry. Seon's products allow for fleet management solutions to further enhance your security. They make certain that you know where your buses are located in real-time — you can also view your video at the exact time of an incident to guarantee that you know what has taken place.

Safety: Our products give you peace-of-mind — the knowledge that you are protecting your passengers and drivers from unacceptable behavior, and ensuring that they arrive safely at their destination. With our fleet performance analysis reports, you are able to increase the safety of your passengers and drivers by reviewing the data — analyze vehicle condition and driver activity. The reports will give you the possibility to comply with the regulatory laws in your area.

Control: Seon understands the challenges of school bus transportation. For this reason, we are currently on a strategic path (investing millions) to make our products easy-to-use and integrated across our product range. Seon will provide the latest technology solutions (such as live viewing and live tracking) to help you monitor your fleet and to assist you with making informed business decisions. Our fleet management solutions permit you to be in control of knowing where your buses are precisely situated right now. We also offer Seon Financing, an easy and effective way to control and plan your budget.

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Take Control — technology that works for you

Seon has developed the vMax® suite of video management software solutions to address the needs of school bus fleets large and small. vMax View hard drive reader and vMax Web come standard with any Seon DVR, while vMax Live Plus and vMax Commander offer additional information management tools designed to increase operational efficiency.









Solutions to Fit Your Needs

- · Choose from entry-level to advanced solutions.
- View, archive, search, and retrieve video and other data efficiently.
- Manage video and other vehicle data with one software interface.
- · Download video from a vehicle to the office automatically.
- Identify precise vehicle or incident location with video synchronized with mapping.

- Monitor your DVR with Health-Check, and configure DVRs remotely.
- Investigate incidents through an integrated video archive file viewer.
- · Oversee each vehicle with integrated vehicle tracking.
- · Benefit from live reporting features.

Management Comparison

Management	vMax® Live+	vMax® Web	vMax [®] View	vMax® Commander
Video Player		✓	✓	1
Archiving		✓	✓	1
Search		✓	✓	1
Vehicle Tracking			✓	✓
DVR Configurator		✓		1
Auto-download*	ū.			✓ .
Health-Check DVR & HDD	1	✓		1
Live Video Viewing		✓		✓
Live Vehicle Tracking	✓			
Live Reports	✓	57-57		
Live Geo-fencing	✓			-
Live Alerts	✓			

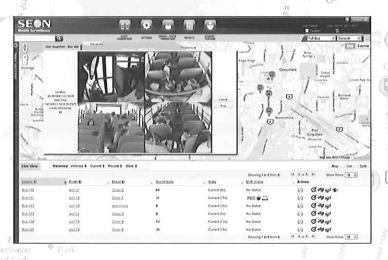
^{*}via Smart-Reach®

vMax® Commander is compatible with EX4, EX8, EX8P, MX4, TL2, TL4, and DX12 DVRs.

vMax® Commander's features require a wireless DVR connection.

vMax® Live Plus — features and benefits

Eagle Ridge



Map View

Track the precise location and movement of a single bus or entire fleet with detailed mapping software.

- Live status view real-time fleet or vehicle position updates and incident alerts.
- Historical data review the activity of each bus in detail including routes, stops, and stop-arm signal deployment.

Live Data

Protect company assets, ensure data integrity, and receive critical vehicle information in real time through live reporting features.

- DVR health status reduce liability by minimizing system downtime and ensuring that necessary data is available at all times.
- Live snapshot view images of the inside of any bus in your fleet in real time.
- Driver behavior monitor bus routes, bus location and direction, ignition, speed, stops, signals, braking, and idling activity.

Zone Management

Set up a designated area for your bus anywhere on the map. If a vehicle travels beyond this point, the system administrator will be notified.

Coquitlam

Oxford Heights





Reports

Increase operational efficiency using advanced fleet performance analysis reports.

- Vehicle condition facilitate maintenance by monitoring fuel consumption, excessive idling, odometer alerts, and more.
- Driver activity review idling, ignition, G-force thresholds, signals, routes, and fuel consumption to ensure good driving practices.
- Regulatory information facilitate fleet maintenance with pre-post trip inspection reports.
- Funding receive the information you need to eliminate inefficiencies and receive accurate ridership and mileage reporting.

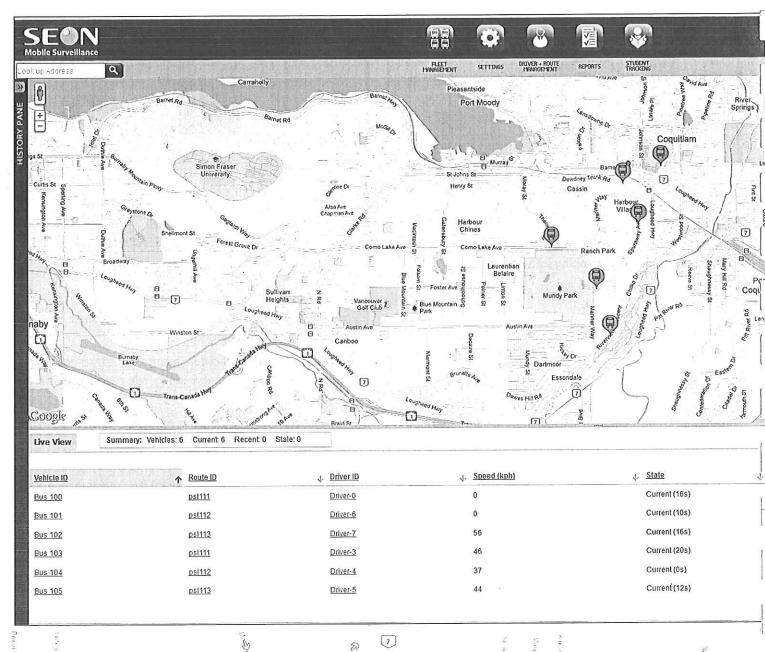
Communication

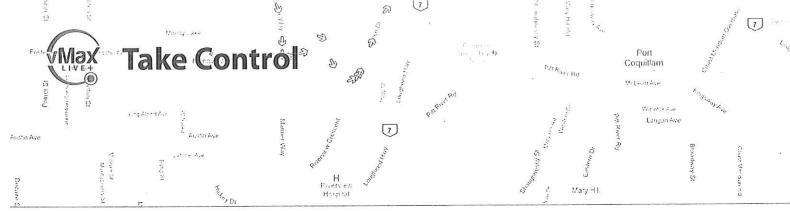
Streamline communication and handle external communication with the public quickly and efficiently.

- Assess situations and respond quickly and effectively, mitigating risk to people and property.
- Handle customer inquiries or complaints with accurate information at your fingertips.

vMax® Live Plus — real-time fleet management

Access live, real-time fleet information anywhere, anytime, and realize the benefits of instant vehicle reporting. The vMax Live Plus web-based system allows fleet managers to address operational issues quickly and efficiently, therefore increasing public safety, reducing risk, and saving money.

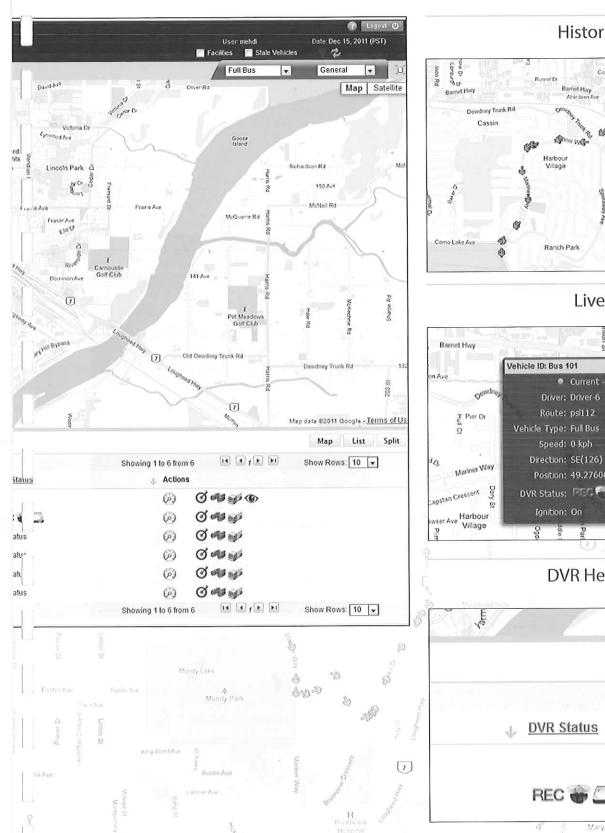




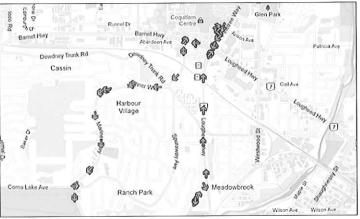
Anywhere and Anytime

- office, mobile, home





Historical Data



Live Status



DVR Health Status

Video Management – convenient web-based access

Seon offers vMax® Web for unparalleled convenience and incident response. Access information from your Seon DVRs easily with any PC using Internet Explorer. Software installation is not required. vMax Web offers the advantage of live video viewing, which gives system administrators instant access to the information required to respond to an incident quickly and effectively (requires Wi-Fi or cellular connection).

vMax Web allows users to view a single channel or 12 channels simultaneously and enables remote configuration, video playback, and archiving. vMax Web displays the precise location of an event, and any activated alarms associated with live, recorded, or archived video.

- · Access your DVR with any PC using Internet Explorer.
- · Benefit from the convenience of live real-time video footage.
- · Easily retrieve, play back, and archive recorded video.
- · View 1 or 12 channels simultaneously.
- · Configure all the DVRs in your fleet remotely.
- · Secure DVR access via username/password.
- · Control user-access level privileges.



Convenient Web Browser DVR Access

Web-based interface: Software installation is not required.

User-friendly: Play, retrieve, and archive video easily.

Live video: Displays real-time video from the DVR.

Remote configuration: Quickly configure your DVR with Internet Explorer.

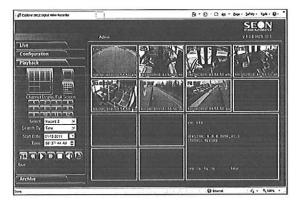
Playback: Easily retrieve and review recorded video.

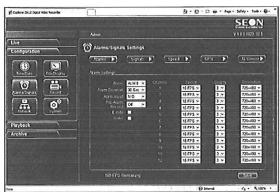
Signals & location: Displays the precise location and activated signals (live, recorded, and archived video).

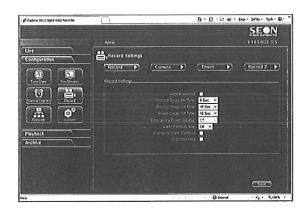
Archiving options: Single or multiple channels can be archived in Seon's proprietary encrypted format for submitting legal evidence. Alternatively, video files can be exported as Microsoft Media Player compatible formats for review by third parties. Individual images can be captured as .bmp or .jpg files.

Multiple views: View a single channel or 12 video channels simultaneously.

Health-Check: Download Health-Check reports (where supported by the DVR).







Video Management – the essential solution

vMax® View comes standard with any Seon DVR. It allows administrators to retrieve key details about onboard incidents or pin-point the exact location a passenger exited using video synchronized with mapping software. vMax View also helps school districts stay on budget and save on maintenance and fuel by ensuring drivers maintain good driving practices and stay on designated routes. vMax View simplifies the viewing, archiving, and retrieval of video data, and allows easy searching by video clip, alarm, or date and time. It features simple image and video archives, which utilize standard .jpg and .avi formats as well as a proprietary encrypted video archive format.

- View, archive, search, and retrieve video and other data efficiently.
- Manage video and other vehicle data with one software interface.
- · Search and playback video from the comfort of your desk.
- Investigate incidents through an integrated video archive file viewer.
- Multiple camera AVI archiving.
- · Offers reporting features.



Video and Vehicle Data at Your Fingertips

User-friendly: Features easy-to-use software with straightforward play, forward and rewind buttons, as well as a timeline with user-adjustable zoom and scroll.

Precise location: Displays the precise location of the vehicle on a street map.

Synchronicity: Vehicle position is displayed in a separate window and synchronized with video playback.

Vehicle path: Configurable to show just the current position or path of the vehicle.

Multiple views: View 1, 4, 6, 9 or more video channels simultaneously.

Blurring feature: Protect the privacy of individuals who are not relevant to the event.

Auto-center/scroll: Configurable auto-center/scroll.

Complete maps: Updated maps of the US and Canada*.

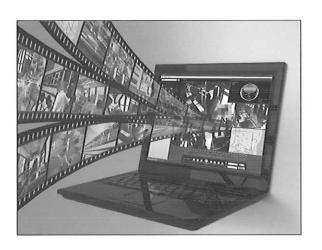
User-selectable playback speed: Play at normal speed, or skip forward or back to the desired location.

Archiving options: Each channel or multiple channels can be archived as an .avi file; individual images can be archived as .bmp or .jpg files.

Transferability: Copy and paste the map display to MS Office[™] applications (i.e., Word[™], PowerPoint[™], etc.).

*Internet connection required.

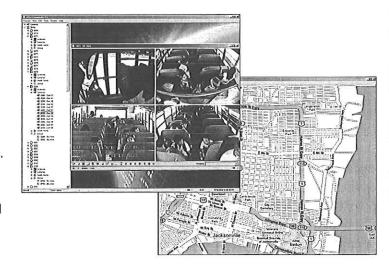




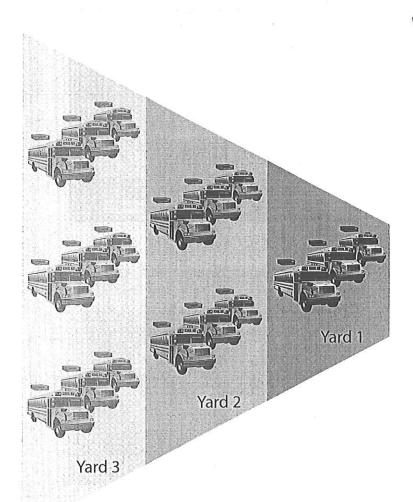
Video & Recorded Data Management

- the ultimate solution

Seon has developed the ultimate solution to help school transportation administrators manage all the video and recorded data from their fleet. vMax® Commander is a scalable software system that simplifies and automates regular tasks. In conjunction with Seon's Smart-Reach® wireless solution, vMax Commander eliminates the need to manually retrieve hard drives. Use one convenient software interface to monitor vehicles, automatically download alarmed events, receive system health reports, and configure DVRs, all from the convenience of a central office location.



Take Control







vMax® Commander Features

- Supports the full line of Seon DVRs including EX4, EX8, EX8P, TL2/4, MX4, and DX12.
- · Receive automatic notification of alarmed events.
- Monitor DVR, hard drive, and camera status to ensure all onboard events are captured (supported functionality depends on the DVR type).
- · Automatically download recorded data from a vehicle while in the office.
- · Manage your fleet with one software interface with convenient reporting tools.
- · Benefit from the convenience of remote DVR configuration.
- Provides a client/server application designed to meet the most demanding customer configurations.
- · Manage video for one or more locations from a single or multiple vMax Commander station.
- Manage users and user-rights through vMax Commander or via Microsoft Active Directory (LDAP).
- · Designed with enterprise security in mind.



Industrial wireless technology
smartreach
with

Scalable video management software





Seon DVR Systems — entry to advanced solutions

Seon's mobile digital video recorders include the Trooper® TL2, Trooper® TL4, the Explorer® MX4, and the Explorer® DX12.

Available in two or four channels, Seon's tough and reliable Trooper TL offers school districts value without compromise. The user-friendly Trooper TL delivers outstanding image quality, while its compact size makes it easy to install. Retrieve key details about an incident using video synchronized with mapping software, and GPS data.

Seon's high-performance four channel dual stream Explorer MX4 system features the finest quality digital video recording available, ultra-efficient features, a suite of smart accessories, and easy retrieval options. The MX4 can record up to 120 frames per

second across all four cameras at 720 x 480, producing crisp, clear images. Based on the Explorer MX4 dual-streaming technology, users can access live video over a low-bandwidth network (cellular subscription fees may apply).

The Explorer DX12 represents the most powerful mobile digital recorder on the market today. Featuring the highest resolution and frame-rate combination available, the DX12 delivers outstanding image quality with the most advanced video storage technology. The system offers 12 channels with the ability to simultaneously record 30 frames-per-second at 720 x 480 on all channels. Dual hard drives provide double the recording capacity of conventional DVRs and provide the ability to switch recording to the next drive in case of HD failure.

Take Control – what's included with your DVR, plus optional enhancements

Software (included): The key to a successful mobile video surveillance solution is easy-to-use software. Whether you require easy playback features, vehicle tracking or large fleet management, we have a solution for you.

Integrated lock-box (included): The new range of digital recorders from Seon now come with an integrated lock-box, saving you the added cost and installation space.

Dual Streaming (included with Explorer® MX4 and Explorer® DX12 only): The MX4 and DX12 are capable of recording two streams of video at different resolutions. A lower resolution recording is used to deliver live video data over a cell GPRS network (additional hardware and cellular subscriptions are required).

Geo-fencing (included with Explorer® MX4 and Explorer® DX12 only): Using GPS technology, geo-fencing allows the administrator to set a designated geographic radius. If the vehicle deviates from this area, it will provide an alert.

Smart-Reach® Wi-Fi (optional): Seon has worked closely with an industry leading Wi-Fi provider to develop Smart-Reach, a robust, industrial strength wireless solution designed specifically for mobile applications.





















DVR Features

- Provides a selection of entry-level to advanced digital recording solutions.
- · Delivers rugged, reliable, tamper-proof, and vandal-resistant designs.
- Features high and low temperature protection and start-up voltage protection.
- Includes video management software for easy viewing, archiving, and retrieval.
- Monitors vehicle speed, turning, signals, and breaking with G-sensor data.
- · Simplifies installation with a wiring consolidator.
- Supports efficient Wi-Fi and live vehicle tracking options.
- Manufactured and serviced in North America to ensure quality control.



DVR Comparison

DVR	Trooper® TL2 TL4	Explorer® MX4	Explorer® DX12
Cameras Supported	2/4	4	12
Compression	H.264	MPEG-4	H.264
Storage Capacity†	Up to 750 GB**	Up to 750 GB	Up to 1.5 TB
Total Frame Rate (Aggregate)	60	120	480
Maximum Resolution D1	720 x 480	720 x 480	720 x 480
Maximum Resolution at 30 FPS††	✓	✓	✓
Hard Drive	✓	✓	✓
*Smart Features	×	✓	✓
Audio Channels	2/4	4	12
Panic Alarm Input	✓	✓	✓
Event Button/Diagnostic	✓	✓	✓
GPS	✓	✓	✓
USB	✓	✓	✓
Network Interface (TCP/IP), LAN	✓	✓	✓
Mapping (vMax®)	✓	✓	✓
Wi-Fi (Smart-Reach®)	✓	✓	✓
Integrated DVR Lock-box	✓	✓	✓
Geo-fencing†††		✓	✓
Dual Streaming††††		✓	✓

[×] Excluding Smart-Link™ (not required for Trooper TL2 | TL4)

†Storage Capacity — Solid State hard drive available upon request.

††Maximum Resolution — 30 FPS (frames per second) at full D1 resolution on all video channels.

†††Geo-fencing — using GPS technology, geo-fencing allows the administrator to set a designated geographic radius; if the vehicle deviates from this area, it will provide an alert.

††††Dual Streaming — enables the transmission of video on one stream to low bandwidth applications, while the second stream retains the quality of higher resolution video.

*Smart Features:

Smart-Temp™ — ensures the DVR stays at its optimal operational temperature.

Smart-Start™ — safeguards the DVR against electrical spikes with vehicle start-up voltage protection.

Smart-Speed™ — records vehicle speed with a built-in monitor.

Smart-Link™ Module — makes DVR installation quick and easy using a wiring consolidator.

Recording Resolution



720 x 480 D1 resolution produces a high quality image.



352 x 240 CIF resolution video recording size.



When CIF (352 x 240) is expanded up to 720 x 480 for larger viewing, it produces a poorer quality image.

^{**} TL2 Storage Capacity is up to 500GB

Value Without Compromise Trooper® TL

The feature-packed Trooper TL series offers the best value in its class. It is the ideal video surveillance solution for school districts that demand value without compromise. Representing the next generation of a proven product, the TL offers safety, security, and control in one compact, high-performance package.

Available in two or four channels, the TL series offers reliable, superior quality video with up to 30 FPS (per camera) at 720 x 480 resolution. New and efficient H.264 compression means the TL also provides the best image quality on the market and increased video storage. The unit's compact size, integrated lock-box, and simple mounting system also enables quick and easy installation.

The TL series solution comes with a simple point-and-click graphical user-interface and easy-to-use software. The DVR also integrates seamlessly with Seon's Smart-Reach® Wi-Fi solution for managing video data remotely. The mapping extension of the video display software allows the system administrator to track vehicles and retrieve key details about an incident synchronized with video footage. System status reporting is also available with an on-screen display of up to five signals (alarms, braking, turns, stop arm, etc.).

Included Features



















Optional Enhancements:









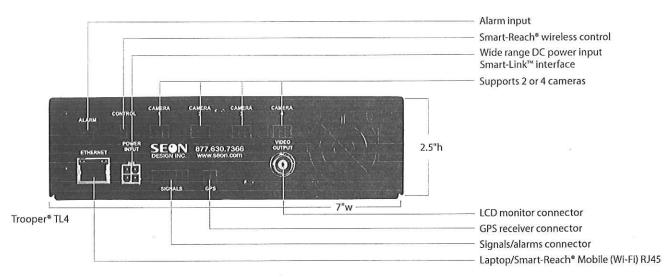




How to order

Product #	Product Name/Description	
TS21P20H320G	Trooper TL 2 channel , security front cover with lock set, mounting bracket, power harness, 320GB hard drive	
TS21P20H500G	Trooper TL 2 channel , security front cover with lock set, mounting bracket, power harness, 500GB hard drive	
TS41P20H320G	Trooper TL 4 channel, security front cover with lock set, mounting bracket, power harness, 320GB hard drive	
TS41P20H500G	Trooper TL 4 channel , security front cover with lock set, mounting bracket, power harness, 500GB hard drive	
TS41P20H750G	Trooper TL 4 channel , security front cover with lock set, mounting bracket, power harness, 750GB hard drive	

Easy installation



Trooper TL Features

- · Supports 2 or 4 cameras with audio.
- · Features H.264 compression to provide premium image quality.
- · Stores up to 750 GB for plenty of recording space.
- Records up to 30 FPS per camera at 720 x 480 for high image detail.
- · Offers Wi-Fi capability to access video data management remotely.
- · Provides a simple point-and-click graphical user-interface.
- · Offers a compact, integrated lock-box design.
- · Includes a user-friendly software program.
- · Supports GPS and mapping software for vehicle tracking.





Specifications

Video	
Recording Channels	2/4 video channels, 2/4 audio channels
Video Resolution	720 x 480 D1 at 30 FPS on all video channels (60 FPS aggregate)
Recording Rate	1 to 30 FPS, adjustable for each channel
Compression	H.264
Quality Settings	Adjustable, 6 levels
Auto Overwrite	Selectable On/Off protected alarms
Display Modes	Single camera, quad
Playback Rate	Frame advance to 32x
Search Function	Segment, alarm, date/time, event
User Interface	OSD with remote or mouse, web browser, vMax® software suite
Timer	12 programmable timers
Delay On/Off	Selectable 0 to 60 min.
On-Screen Display	Voltage, time & date, HDD size, % full, alarm count internal temperature
Storage	
Media	Removable media cartridge with hard drive
Capacity	Up to 750 GB
Input/Output	
Network Interface	RJ45 Ethernet port (TCP/IP)
Wiring Harness	20' (6 m) harness for power (other harness lengths are available)
Panic Alarm Input	20' (6 m) harness with panic button
Event/Diagnostic Button	An indicator panel that marks events for quick searches, auto downloads and displays DVR status
Signals/Alarms	5 signal/alarm inputs
	The state of the s

Smart Features	
Smart-Temp™	Ensures the DVR stays at its optimal operational temperature
Smart-Speed™	A built-in monitor that records vehicle speed
Smart-Start™	Safeguards the DVR against electrical spikes with vehicle start-up voltage protection
GPS Ready	Records vehicle speed and location with optional GPS receiver; enables synchronized mapping when used with vMax® software
Electrical	
Voltage Range	8 to 32 VDC
Transient Protection	600 W per signal input
Configuration Backup	Time & programmed info (retained up to 10 years)
Mechanical/General	
Dimensions (H x W x D)	2.5 x 7 x 9.5 in (64 x 188 x 241 mm)
DVR Weight	5.3 lbs (2.4 kg) with lock-box
Environmental	
Operating Temperature	-30 to 50°C (-22 to 122°F)
Approvals	
Emissions	FCC
Safety	UL

Redefining Video Recording Explorer® MX4

The Explorer MX4 is Seon's high performance four channel DVR solution. Using MPEG-4 compression, all four channels can simultaneously record 30 FPS with D1 (720 x 480) resolution. Built-in dual streaming allows the recording of two information streams, one designed for high-resolution playback on a PC, and the other for real-time viewing over the web or GPRS network.

An intuitive graphical configuration user-interface makes installation quick and easy. Easy-to-use software allows the system administrator to track vehicles and retrieve key details about an incident using video footage synchronized with mapping software, or the option of live tracking.

The MX4 enhances fleet control through features such as geo-fencing, which uses GPS technology to designate a geographic boundary for the vehicle. Other special features include the wake-on alarm, which can turn the DVR on without a vehicle ignition signal in response to a vehicle break-in (with optional sensor).

Finally, the MX4's programmable multi-view monitor feature allows drivers to see events in hard to view areas in and around the vehicle in real time. For drivers and passengers, this means increased safety.

Included Features















How to order

ES41P20H750G









Product # Product Name/Description Explorer MX 4 channel, security front cover with lock set, mounting bracket, power harness, 320GB hard disk drive Explorer MX 4 channel, security front cover with lock set, mounting bracket, power harness, 500GB hard disk drive Explorer MX 4 channel, security front cover with lock set, mounting bracket, power harness, 500GB hard disk drive

hard disk drive

lock set, mounting bracket, power harness, 750GB

Optional Enhancements:











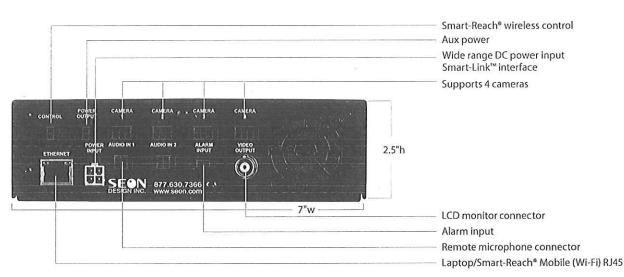








Easy installation



Explorer MX4 Features

- · Supports 4 cameras with audio.
- Features MPEG-4 compression to provide outstanding image quality.
- Stores up to 750 GB for plenty of recording space.
- Records 30 FPS per camera at 720 x 480 (120 FPS aggregate) for high image detail.
- · Provides an alert if a vehicle leaves its designated area.
- Records two information streams utilizing dual stream technology

 one stream for hi-res playback, and one for real-time viewing
 over a GPRS or other cellular network (with optional equipment).
- Includes a wake-on alarm which turns on the DVR in response to a vehicle break-in (with optional sensor).





Specifications

Video		
Recording Channels	4 video channels, 4 audio channels	
Video Resolution	720 x 480 D1 at 30 FPS on all video channels (120 FPS aggregate)	
Recording Rate Main Stream	30 FPS on all video channels at D1 resolution (120 FPS aggregate)	
Recording Rate Second Stream	On/off, FPS and resolution configurable – shares resources with the main stream	
Quality Settings	Adjustable, 4 levels	
Auto Overwrite	Selectable on/off protected alarms	
Display Modes	Single camera, quad	
Playback Rate	Frame advance to 32x	
Search Function	Segment, alarm, date/time, event	
User Interface	OSD with remote or mouse, web browser, vMax® software suite	
Timer	12 programmable timers	
Delay On/Off	Selectable 0 to 60 min.	
On-Screen Display	Voltage, time & date, HDD size, % full, alarm count, internal temperature	
Dual Streaming	Technology that sends small, low-bandwidth vid images live over a cell phone network (120 FPS)	
Storage		
Media	Removable media cartridge with hard drive	
Capacity	Up to 750 GB	
Input/Output		
Network Interface	RJ45 Ethernet port (TCP/IP)	
Wiring Harness	20' (6 m) harness for power (other harness lengths are available)	
Panic Alarm Input	20' (6 m) harness with panic button	
Smart Features		
Smart-Temp™	Ensures the DVR stays at its optimal operational temperature	
Smart-Speed™	A built-in monitor that records vehicle speed	
Smart-Start™	Safeguards the DVR against electrical spikes with vehicle start-up voltage protection	

Electrical	
Voltage Range	8 to 32 VDC
Transient Protection	600 W per signal input
Configuration Backup	Time & programmed info (retained up to 10 years)
Mechanical/General	
Dimensions (H x W x D)	2.5 x 7 x 9.5 in (64 x 188 x 241 mm)
DVR Weight	5.3 lbs (2.4 kg) with lock-box
Environmental	
Operating Temperature	-30 to 50°C (-22 to 122°F)
Approvals	
Emissions	FCC
Safety	UL

Specifications – Plus System		
Smart-Link™ Module	Makes DVR installation quick and easy using a wiring consolidator	
Signals	5 signal inputs	
Alarms	4 alarm inputs	
Event/Diagnostic Button	An indicator panel that marks events for quick searches and displays DVR status	
GPS Ready	Records vehicle speed and location with optional GPS receiver; enables synchronized mapping when used with vMax® software	
Geo-fencing	Uses GPS technology to set a geographical boundary for a vehicle; receive an alert if it deviates	

Power and Performance Explorer® DX12

The Explorer DX12 represents the most powerful mobile digital recorder on the market today. Featuring the highest resolution and frame-rate combination available, the DX12 delivers outstanding image quality with the most advanced video storage technology. The system offers 12 channels with the ability to simultaneously record 30 frames-per-second at 720 x 480 resolution on all channels, and dual hard drives provide double the recording capacity of conventional DVRs.

The DX12 facilitates incident management through real-time viewing. Dual streaming technology records two video streams, one lower resolution stream for viewing over a cell phone network, and one high-resolution stream for playback on a PC.

The DX12 includes an inertia sensor, which logs and displays G-force data and provides incident alerts. An automated Health-Check monitors DVR and hard drive status and notifies the administrator of any issues, ensuring all onboard events are captured. Supported features include geo-fencing, which allows a system administrator to designate a geographic boundary and receive notification if a vehicle deviates.

Installing the DX12 is quick and easy through an intuitive graphical configuration user-interface. Easy-to-use software allows the system administrator to track vehicles and retrieve key details about an incident using video footage synchronized with mapping software.

Included Features

















INTEGRATED LOCK BOX











How to order

Product #	Product Name/Description
DX12NH640	Explorer DX12 channel , security front cover with lock set, mounting bracket, power harness, no battery back-up, two 320GB hard drives
DX12NH1T0	Explorer DX12 channel , security front cover with lock set, mounting bracket, power harness 20, no battery back-up, two 500GB hard drives
DX12NH1T5	Explorer DX12 channel, security front cover with lock set, mounting bracket, power harness, no battery back-up, 1.5TB (two 750 GB hard drives)









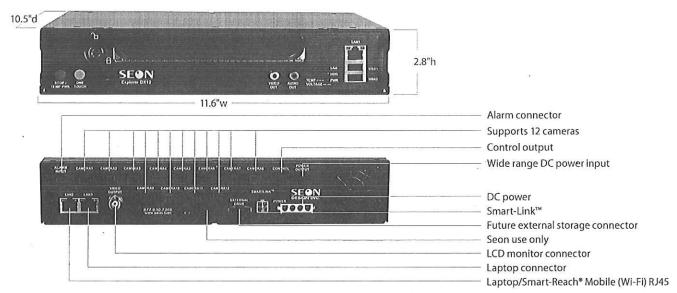








Easy installation



Explorer DX12 Features

- · Supports up to 12 cameras with audio.
- Features H.264 compression to provide premium image quality.
- Stores up to 1.5 TB of video for maximum video retention time.
- Delivers high detail with 720 x 480 at 30 FPS on all channels.
- · Monitors DVR and HDD status with Health-Check.
- · Includes a built-in 3-axis accelerometer to provide critical vehicle data.
- · Doubles the reliability of a single HD system with a dual HD.
- · Provides an alert if a vehicle leaves its designated area (geo-fencing).
- Records two information streams utilizing dual stream technology –
 one stream for hi-res playback, and one for real-time viewing over a
 GPRS or other cellular network (with optional equipment).





Specifications

Recording Channels	12 video channels, 12 audio channels	
Video Resolution	720 x 480 D1	
Recording Rate Main Stream	30 FPS on all video channels at D1 resolution (360 FPS aggregate)	
Recording Rate Second Stream	720 x 240 or 360 x 240 at 1, 3, 5 FPS	
Compression	H.264	
Quality Settings	Adjustable, 4 levels	
Auto Overwrite	Selectable on/off protected alarms	
User Interface	OSD with remote or mouse, web browser, vMax® software suite	
Timer	12 programmable timers	
Delay On/Off	Selectable 0 to 4 hours	
On-Screen Display	Voltage, time & date, HDD size, % full, alarm count, internal temperature	
Dual Streaming	Technology that sends small, low-bandwidth video images live over a cell phone network (120 FPS)	
Storage		
Fail Safe Design	In case of HD failure switches recording to the other HD	
Media	Removable media cartridge supports dual mobile hard drives	
Capacity	Up to 1.5 TB	
Extended Capacity	eSATA port for additional external storage drive	
Input/Output		
Alarms	4 alarm inputs	
Signals	10 signal inputs	
Network Interface	3-port Ethernet switch (TCP/IP)	
Event/Diagnostic Button	An indicator panel that marks events for quick searches, auto downloads and displays DVR status	
Video Out	1 BNC	

Smart Features		
Smart-Temp™	Ensures the DVR stays at its optimal operational temperature	
Smart-Start™	Safeguards the DVR against electrical spikes with vehicle start-up voltage protection	
Smart-Link™ Module	Makes DVR installation quick and easy using a wiring consolidator	
Health Check	Monitors recorder, attached cameras and HD drive health status	
Wi-Fi Ready	Supports the Smart-Reach industrial mobile Wi-Fi solution	
GPS Ready	Records vehicle speed and location with optional GPS receiver; enables synchronized mapping when used with vMax® software	
Geo-fencing	Uses GPS technology to set a geographical boundary for a vehicle; receive an alert if it deviates	
Inertia Sensor	Includes built-in 3 axis G-sensor	
Electrical		
Voltage Range	8 to 32 VDC	
Transient Protection	600 W per signal input, 1.5 kW power input	
Configuration Backup	Settings retained up to 10 years	
Backup Power Controller	Up to 10 minutes (factory option only)	
Mechanical/General		
Dimensions (H x W x D)	2.8 x 11.6 x 10.5 in (72 x 294 x 267 mm)	
Weight	6.6 lbs (3 kg)	
Environmental		
Operating Temperature	-30 to 50°C (-22 to 122°F)	
Approvals		
Emissions	FCC	
Safety	UL	

Seon Cameras — designed for mobile environments

Seon offers a selection of wedge, dome and other specialized cameras designed for mobile environments. Each camera can be configured to meet your unique requirements, offering audio and day/night capabilities. They also come pre-wired for audio and power, simplifying the installation process.

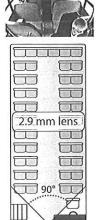
The outdoor CA Wedge offers durability and versatility in a rugged, vandal-proof housing that is both dust and waterproof. The camera is fully adjustable to increase the range of viewing angles. It supports lenses from 2.9 to 3.6 mm for wide-angle doorentry applications, and 16 to 25 mm lenses for identifying stoparm violation vehicles. The CA Wedge provides color imaging in normal lighting, and automatically switches to black and white

in low-lighting conditions. Models with the optional infrared illumination deliver clear images up to 40 feet (13 meters) away in complete darkness.

Compact and vandal-resistant, Seon's SQ Dome camera is designed to meet the specific needs of mobile applications. The flexibility of the SQ allows for the easy adjustment of the camera lens to include different parts of the bus. The SQ Dome includes infrared capabilities, which allows the cameras to see in total darkness. This camera also provides color images in normal lighting, and switches to black and white in low-light conditions.

Camera Angles

Lens Reference Guide: suggested camera coverage



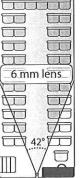
Camera lens: 2.9 mm, 90°



3 5 3.6 mm lens (d) (d) 10 10% **B W**

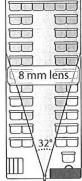
Camera lens: 3.6 mm, 74°





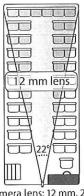
Camera lens: 6 mm, 42°





Camera lens: 8 mm, 32°



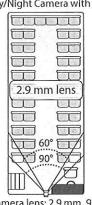


Camera lens: 12 mm, 22°

Lens & IR Guide: suggested camera coverage



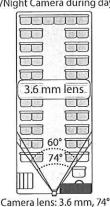
Day/Night Camera with IR



Camera lens: 2.9 mm, 90° IR lens: wide angle, 60°

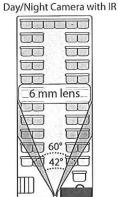


Day/Night Camera during daytime

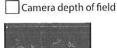


IR lens: wide angle, 60°

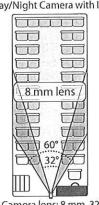




Camera lens: 6 mm, 42° IR lens: wide angle, 60°



Day/Night Camera with IR

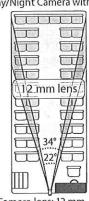


Camera lens: 8 mm, 32° IR lens: wide angle, 60°



IR Illuminator depth of field

Day/Night Camera with IR



Camera lens: 12 mm, 22° IR lens: narrow, 34

CA Outdoor Wedge

- Features a high resolution 650 TVL day/night sensor for sharp images day and night.
- Performs with a variety of lens: 16.0 and 25.0 mm for wide-angle to telephoto coverage.
- · Provides anti-glare protection and scratch-resistance.
- Delivers a rugged, weatherproof metal housing to increase vandal-resistance for external vehicle surveillance applications.
- Includes local video-out for quick setup and viewing of the camera.
- Features a 350° rotating gimbal to support vertical and angular mounting.

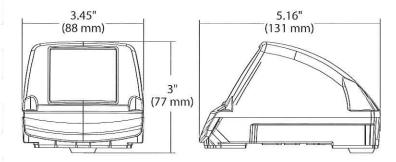


Specifications

Mechanical/General	
Enclosure Material	Solid aluminum alloy, powder coated
Viewing Windows	Impact-resistant polycarbonate, scratch-resistant
Mounting Options	Ceiling- or wall-mount
Dimensions (W x L x H)	3.45 x 5.16 x 3" (88 x 131 x 77 mm)
Weight	1.2 lbs (0.55 kg)
Wiring Harness	Standard 20' (6 m) harness for video & power
Gimbal	Rotate: 350°, Pan: 15°, Tilt: 30°
Electrical	
Power Consumption	7 W (max.)
Voltage Range	10 to 17 VDC (powered by DVR)
Transient Protection	1.5 kW
Camera Sensitivity	0.1 lux at F1.2 (B&W, D/N), 0 lux (IR on)
Backlight Compensation (BLC)	On/off
IR	Optional, 18 high efficiency LEDs
Horizontal resolution	650 TV Lines
Environmental	
Environmental Rating	IP67 (outdoor, high-pressure, water-resistant)
Operating Temperature	-40 to 140°F (-40 to 60°C)
Approvals	
Emissions	FCC

How to order

Without Infrared	Only supports 16mm and 25mm lens options
Product #	Product Name/Description
CA9xxE06, CA9xxE12, CA9xxE20	Day/Night 650TVL camera, exterior (no infrared, no audio), 6 ft./ 12 ft./ 20 ft. harness
CA9xxE50	Day/Night 650TVL camera, exterior (no infrared, no audio), 50 ft. harness
CA9xxE75	Day/Night 650TVL camera, exterior (no infrared, no audio), 75 ft. harness



SA Wedge

- Features a high resolution 540 TVL day/night sensor for sharp images day and night.
- Performs with a variety of lenses (2.9, 3.6, 6.0, 8.0, 12.0, 16.0 mm) for wide-angle to telephoto coverage.
- · Provides anti-glare protection and scratch-resistance.
- Delivers a robust metal housing to increase vandal-resistance.
- · Supports infrared capabilities for improved night vision.
- Includes a high fidelity microphone to enable audio recording.

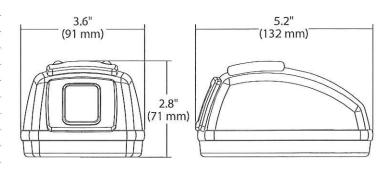


Specifications

Mechanical/General	
Enclosure Material	Formed stainless steel, electrically isolated from camera
Viewing Windows	Dual-position, anti-glare, scratch-resistant, high-impact Lexan® MR-10
Mounting Options	Ceiling- or wall-mount, no bracket required
Dimensions (W x L x H)	3.6 x 5.2 x 2.8" (91 x 132 x 71 mm)
Weight	1.1 lbs (0.5 kg)
Wiring Harness	Standard 20' (6 m) harness for video & power
Audio	*
Microphone	High-quality, mechanically isolated
Frequency Response	200 Hz to 5 kHz (filtered to improve voice response)
Sensitivity	-45 dB
Audio Output	Line level
Electrical	
Power Consumption	2.3 W
Voltage Range	11 to 18 VDC (powered by DVR)
Transient Protection	1.5 kW
Camera Sensitivity	0.1 lux at F2.0
Horizontal resolution	540 TV Lines
Minimum Load	600 ohm
Environmental	
Environmental Rating	IP66
Operating Temperature	-4 to 140°F (-20 to 60°C)
Approvals	
Emissions	FCC .
Safety	UL

How to order

Product #	Product Name/Description
SA8xxA1, SA8xxA6, SA8xxA7	Day/Night 540TVL camera, audio, 20 ft./ 6 ft./ 12 ft. harness
SA8xxA2	Day/Night 540TVL camera, audio, 50 ft. harness
SA8xxA3	Day/Night 540TVL camera, audio, 75 ft. harness
SA-IRW	IR Illuminator module for SA, wide angle
SA-IRN	IR Illuminator module for SA, narrow angle



SQ & SJ Domes

- Features a high resolution 540 TVL day/night sensor for sharp images day and night.
- Performs with a variety of lenses (2.9, 3.6, 6.0, 8.0, 12.0, 16.0 mm) for wide-angle to telephoto coverage.
- Provides anti-glare protection and scratch-resistance.
- Delivers a robust metal housing to increase vandal-resistance.
- · Supports infrared capabilities for improved night vision.
- Includes a high fidelity microphone to enable audio recording.





SQ Dome

SJ Dome

Specifications

	5.40 TV/ L
Horizontal resolution	540 TV Lines
Sensitivity	-45 dB
IR	12 high efficiency LEDs
Camera Sensitivity	0.1 lux at F2.0 (B&W, D/N), 0 lux (IR on)
Audio	
Microphone	High-quality, mechanically isolated
Frequency Response	200 Hz to 5 kHz (filtered to improve voice response
Audio Output	Line level
Electrical	
Power Consumption	2.3 W (IR off); 4.2 W (IR on)
Voltage Range	11 to 17 VDC (powered by DVR)
Transient Protection	1.5 kW
Minimum Load	600 ohm
Mechanical/General	
Enclosure Material	Solid aluminum alloy
Dome	Impact-resistant polycarbonate, anti-glare, scratch-resistant hard coating, UV protected
Dimensions	Height 3.1" (78 mm); dome diameter 3.7" (93 mm)
Weight	0.8 lbs (0.3 kg)
Environmental	
Environmental Rating	Indoor IP54
Operating Temperature	-4 to 140°F (-20 to 60°C)
Approvals	
Emissions	FCC
Safety	UL

SJ8 Dome	
Horizontal resolution	540 TV Lines
Sensitivity	-45 dB
Camera Sensitivity	0.1 lux at F2.0 (B&W, D/N)
Audio	
Microphone	High-quality, mechanically isolated
Frequency Response	200 Hz to 5 kHz (filtered to improve voice response)
Audio Output	Line level
Electrical	
Power Consumption	2.3 W
Voltage Range	11 to 17 VDC (powered by DVR)
Transient Protection	1.5 kW
Minimum Load	600 ohm
Mechanical/General	
Enclosure Material	Solid aluminum alloy
Dome	Impact-resistant polycarbonate, anti-glare, scratch-resistant hard coating, UV protected
Dimensions	Height 3.1" (78 mm); dome diameter 3.7" (93 mm)
Weight	0.8 lbs (0.3 kg)
Environmental	
Environmental Rating	Indoor IP54
Operating Temperature	-4 to 140°F (-20 to 60°C)
Approvals	
Emissions	FCC
Safety	UL

How to order

Product #	Product Name/Description
SQ8xxA1, SQ8xxA6, SQ8xxA7	Integrated IR Dome Day/Night camera, Audio, 20 ft./ 6 ft./ 12 ft. harness
SQ8xxA2	Integrated IR Dome Day/Night camera, Audio, 50 ft. harness
SQ8xxA3	Integrated IR Dome Day/Night camera, Audio, 75 ft. harness
SQ8xxA4	Integrated IR Dome Day/Night camera, Audio, 100 ft. harness

Product #	Product Name/Description
SJ8xxA1, SJ8xxA6,	Dome Day/Night 540TVL camera, Audio, 20 ft./ 6 ft./
SJ8xxA7	12 ft. harness
SJ8xxAy	Dome Day/Night 540TVL camera, Audio, 50 ft. harness
SJ8xxAy	Dome Day/Night 540TVL camera, Audio, 75 ft. harness

Rear Vision Camera System

- Provides a programmable multi-view monitor to increase safety.
- Allows a driver to monitor events in difficult to see areas in and around the vehicle in real time.





LCD Monitor

Rear Vision Camera

Rear Vision Camera	
Resolution	420 TV lines
Image Sensor	1/3" CCD w/IR LED
Minimum illumination	0.02 lux, F1.2
Lens	2.9 mm
Water Resistance	IP68
View Angle	120°
Operating Temperature	14 to 122°F (-10 to 50°C)
Optional	66' (20 m) extension cable

Audio function "CH-611CR18A"

LCD Monitor	
Туре	Color LCD TV monitor
Size (W x H)	6.06 x 3.42" (154 x 87 mm), 7" diagonal
Element TFT LCD	0.02 lux, F1.2
Format (W x H)	480 x 234 pixels
Back Light	Cold Cathode Fluorescent Lamp
Power Supply	Car Battery (12 VDC)
Power Consumption	12 VDC, 9 W
Connection Terminals	VGA in jack (YW)/ Audio1 in jack (RD)/ AV input jack (35φ)/ Ear Out jack (35φ)/ DC 12V in wire (RD)/ Ground wire (BK)/Touch Panel in jack (USB)
Operating Temperature	32 to 122°F (0 to 50°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Dimensions (H x W x D)	4.65 x 7.17 x 1.02" (118 x 182 x 26 mm)
Weight	0.84 lbs (0.38 kg)
Optional	Sun-cover
Optional	Wide power from 12 to 24 V
Optional	Reverse function

Optional

Wi-Fi Networking with Smart-Reach®

— an industrial solution

Seon has worked closely with an industry leading Wi-Fi provider (HP) to develop Smart-Reach, a robust, industrial strength wireless solution designed specifically for mobile applications. Smart-Reach is comprised of a mobile bridge installed on each vehicle with multiple access points located around the yard.

An effective mobile wireless network must address the unique challenges that mobile environments present. Buses that enter a yard must be able to locate a strong wireless signal, and the system should have sufficient power and bandwidth to download video and other data reliably and efficiently from multiple buses and locations.

The system should also work seamlessly with other onboard technologies, and it must not conflict with existing IT infrastructure.

Consumer-grade wireless solutions currently on the market often do not address the unique challenges posed by moving vehicles in a school bus yard. They can be inexpensive, but they are often inadequate when deployed in mobile environments. Consumer grade wireless solutions aren't strong enough to withstand the rigors of the road, they aren't smart enough to handle roaming reliably, and they aren't secure, stable or efficient enough for industrial use. Seon's industrial-grade Smart-Reach system is the ideal wireless solution for mobile environments.

What to consider when choosing a Wi-Fi system

There are a number of factors that an effective, industrial-grade wireless solution must address.

Technology: Digital video recorders (DVRs) must integrate wireless technology and be robust enough to withstand the rigors of the road.

Automatic Roaming: Vehicles must be capable of finding the strongest signal among multiple access points, and switch signals automatically if required.

Integration: The system must not conflict with existing networks and IT infrastructure and work seamlessly with other onboard technologies.

Efficiency: The system must have sufficient power and bandwidth to download video and other data reliably and efficiently, regardless of the number of buses involved.

Cost: The solution must be cost-effective and work.

Location: The network must be able to accommodate the size and geography of the transportation property, whether that includes one yard, multiple yards, or situations in which the central office is in a different location than the depot.

Obstructions: The network must be able to function regardless of any obstacles or interference, which includes buildings, trees, and other wireless signals.

Security: The wireless technology must offer the latest security protection.

Expertise: The system vendor must have experience implementing effective wireless solutions in mobile environments and provide on-demand technical support.

Visit www.seon.com to view Seon's white paper, Wireless Networks in a Mobile World – industrial vs consumer solutions.

Components

Smart-Reach® Mobile Bridge (on the vehicle)

Enables organizations to connect with the data on the DVR. It connects legacy Ethernet or serial communications stations to a wireless local area network (LAN) with simplicity and security.

Smart-Reach® Lite

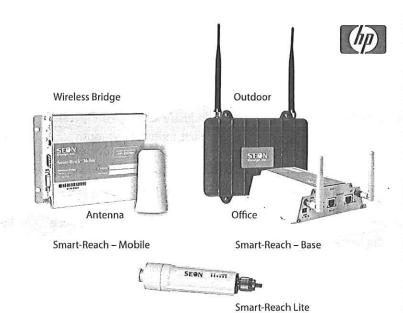
A wireless solution for fleets of less than 50 with only one access point.

Smart-Reach® Base (office/outdoors)

Delivers scalable, seamless wireless access anywhere, anytime. Unlike the thin/lite wireless access points found in home solutions, the Smart-Reach access point feature-set is complete and adaptable, dispensing multiple network services, enforcing robust security policies and delivering high performance client access.

Smart-Reach Features

- Benefit from the performance of an industrial-grade wireless solution.
- Realize the capabilities of a robust wireless network with automatic roaming.
- · Protect your organization with a secure network.
- Utilize a solution that includes intranet, web-interface, and Wi-Fi integration.
- Know there is dedicated IT installation and support team available on-demand.
- · Use an FCC compliant system.



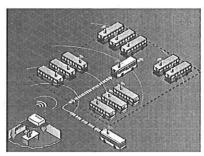
Typical Network Scenarios

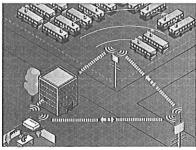
One Access Point: In this scenario, the entire school bus property is in range of one access point. When a bus returns to the yard, it picks up the signal, logs on and parks. Data can be downloaded to the office as soon as the bus is in range. Consumer wireless solutions are capable of this arrangement, but there are stability issues. Connections are easily lost, and the data that can be transmitted is limited.

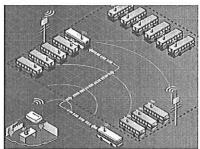
Directional Access Points: In some school bus properties there are obstructions between the bus yard and the office which block the wireless signal. The solution involves installing a directional access point that will direct signals to another access point, which then communicates with the yard's multiple access point network. Consumer grade wireless technology is incapable of this scenario.

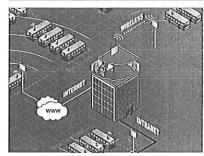
Multiple Access Points: In order to improve roaming capability, multiple access points can be installed on a school bus property. When a bus enters the yard, it connects to the strongest signal it can detect. The system is intelligent enough to drop a weaker signal and pick up the stronger one. Consumer grade wireless technology is incapable of switching to a stronger signal.

One Office, Multiple Yards: In this situation, a central office can communicate with multiple bus yards, regardless of their location. This solution can be implemented through the Internet, through wireless technology or through an existing intranet network, and it can accommodate all the other networking scenarios. This solution is beyond the capabilities of consumer grade wireless technology.









Accessories — complete your system

GPS Options

A Global Positioning System (GPS) puts an impressive amount of information at your fingertips, including vehicle location, speed, and time data. You can also view this information synchronized with mapping. The Seon GPS4 is a receiver with an integrated magnetic base. The receiver is 1.4 x 1.7 x 0.6 inches, and weighs just a few ounces for easy installation inside a vehicle.



Media Cartridges with Hard Drive

Trooper® TL Series Media cartridge with 320 and 750 GB mobile 2.5" hard drive **Explorer® MX Series** Media cartridge with 320, 500, and 750 GB mobile 2.5" hard drive **Explorer® DX Series** Media cartridge with 640 GB, 1 TB, and 1.5 TB mobile 2.5" hard drive



Inertia Sensor

- · Detects sudden acceleration, braking, impact, or abrupt cornering of a vehicle.
- Offers a valuable tool for driver training or for recording vehicle information during emergencies.
- Provides a multi-character display to show the acceleration in each axis or vector.
- Utilizes an audible indicator to alert the driver when preset limits have been exceeded.
- · Delivers programmable alerts.



Camera Mounting Post

- Allows the CA/SA series of cameras to be mounted four inches off a flat surface.
- · Raises the camera above a vehicle dash to have a clear view out the windshield.
- · Lowers the camera from a header panel to have a clear view out the windshield.
- · Mounts the camera off a wall to clear an obstacle.
- · Manufactured from cold-rolled steel and epoxy-powder; painted for longevity.



LCD Monitor Kit

- · Allows for ease of configuring DVR settings in the field and aligns cameras.
- Offers a compact 5.6" (142 mm) LCD monitor, ideal for installation.
- · Provides side-mounted volume, color, contrast, and brightness speaker.
- Comes with battery charger & AC adapter.



Smart Link™

- · Simplifies installation with a wiring consolidator.
- Connects up to 5 signals, 4 alarms, 1 diagnostic, and GPS or speed.



Customer Support — business with Seon is easy

Seon Design offers unparalleled support for all our products. Our sales associates are here to help you specify the right solution to meet your unique requirements and achieve the maximum return on your investment.

Our sales team has over 200 years experience collectively in the school bus market. Your sales associate will clearly indicate the products you require to meet your needs, and the cost. Knowledgeable service is never more than a phone call away. At Seon, a friendly voice is always at the other end of the line, ready to respond to your every need. Our Technical Services Call Center is staffed by a dedicated team trained to diagnose and rectify concerns over the phone, regardless of whether the issue is hardware or software related. Our call center team also provides advice on application, installation and operation.

Seon Finance

Seon understands the need to get more out of a diminishing budget. Seon offers a leasing program exclusively through Alliance Funding Group (AFG) to help you keep up-to-date with the latest technology and receive the best support in the industry.

About Alliance Funding Group

Founded in 1998, AFG is one of North America's premier sources for equipment leasing and financing. Their depth of experience and breadth of programs allows us to meet your specific financing needs. AFG has established a reputation for superior customer service and innovative programs.

Benefits:

Have the latest technology: Update your equipment every three years and protect against technological obsolescence.

Make budgeting easy: Know exactly what your expenditure is per year, allowing you to budget accordingly.

Equip the entire fleet: Install your whole fleet with new equipment at the same time and know it will all be compatible.

Improve cash flow: Increase your cash flow through 100% financing (including taxes, warranties, and installation costs).

Receive flexibility & protection: Retain all the guarantees and warranties associated with ownership while having the flexibility to upgrade technology quickly and easily.

Manage taxes: Depending on the type of lease selected, monthly payments may be treated as a fully deductible operating expense. Since lease payments are not treated as "preference" items, a True Lease may help you minimize or avoid Alternative Minimum Taxes.

Benefit from off balance sheet considerations: Through an operating lease, you may enhance select financial ratios and maintain certain loan covenants.

Enjoy other financial advantages: Receive flexible repayment alternatives to match your projected cash flow and flexible "end-of-term" options. Conserve available lines of credit with your bank for working capital purposes.

Easy to set-up: Pre-approval usually takes 24 hours, and Seon will handle the paper work, equipment ordering, delivery, and installation.

Utilize professional services: From start to finish, our project management team is available on-demand to help with every aspect of the installation and support process.

- · Receive immediate purchasing assistance.
- · Receive help writing bid specifications.
- · Contact customer service by phone, email, or mail.
- Access technical support at any time with any issue.
- · Learn about leasing and financing options.
- Join GoToMeeting® or GoToWebinar®.



GoToManage®

Our Technical Service Department can guide you step-bystep through how to install, fix, or operate our software. With permission, our tech support staff can access your computer remotely. We are also able to evaluate whether your computer is utilizing optimal settings, which can improve your system's overall performance.

GoToWebinar®

Seon delivers interactive online seminars and training through GoToWebinar® online conferencing. Learn about Seon products conveniently and without cost from the comfort of your office.

GoToMeeting®

GoToMeeting is an invaluable tool for assisting Seon customers. From basic software set-up to addressing more complex issues, GoToMeeting makes the support process easier.

Seon's sales team can also assist customers with GoToMeeting. If a member of Seon's sales team is unable to visit an actual customer location, GoToMeeting can be used to conduct sales presentations, or provide additional support and training. GoToMeeting is just one more way Seon makes it easy to give the support our customers need.

Seon Website & Web Support

Designed to help customers navigate information quickly and easily, Seon's comprehensive website provides the information you require to choose the right mobile surveillance solution to meet your needs. Customers can compare products side-by-side, from simple, two channel digital video recorders to cutting-edge, high performance solutions.

Seon's website also offers unparalleled support, providing straightforward information on everything from leasing and financing to writing bid specifications. Our technical support section provides software updates and technical documents. Available information includes user manuals, installation diagrams, configuration guides, specification sheets, bid specs, and much much more.

Seon's website also features the latest industry news. The site features an RSS news feed and a media section, where the latest press releases and TV features are available. The media section also offers information about Seon's newest products and services, strategic white papers on mobile surveillance issues, and informative articles on hot topics that matter to the industry. You will also find helpful marketing tools such as Seon's advertisements, catalogs, and brochures.

Seon Design® Inc. Product Warranty

Seon Design Inc. (Seon) warrants the cameras and components listed below against defects in workmanship and materials provided that such defects appear or are discovered within the respective periods specified below and provided further that the purchaser of such products notifies Seon of such defects within thirty (30) days of the appearance or discovery of such defects:

- Three (3) years from date of purchase, parts and labor on all Cameras.
- One (1) year from date of purchase, parts and labor on the SA-IR Illuminator.
- Three (3) years from date of purchase, parts and labor on the Explorer® Premier, DX, EX, MX, and Trooper® TL series mobile DVR Systems.
- One (1) year from date of purchase, parts and labor on all other products and accessories.

All service/replacement parts and repairs are warranted for a period of 90 days.

Subject to the terms and conditions listed below, during the relevant warranty period, Seon will repair, replace, or refund the purchase price for the defective product, whichever Seon considers to be appropriate in the circumstances, in Seon's sole and arbitrary opinion, free of charge, any defective products returned prepaid. In the event purchaser has a problem with any Seon product, please call and request a

RETURN AUTHORIZATION (RA) NUMBER from the Service Department. Please call 877-630-7366 or (604) 941-0880 and ask for the Service Department. Be sure to have the model number, serial number and the nature of the problem available for the customer service representative. Prior authorization MUST be obtained for all returns, exchanges, or credits. ITEMS SHIPPED TO SEON WITHOUT A CLEARLY IDENTIFIED RA NUMBER MAY BE REFUSED.

Products returned will be tested to verify the defect. Upon verification of the defect, the product will be repaired or exchanged, or the purchase price will be refunded or credited to the customer's account, at the sole option of Seon. In the event of replacement, the returned product will be credited to the customer's account and a new invoice issued for the replacement item. Seon reserves the right to refund the purchase price or to issue a credit only in lieu of replacement. Seon may use new or refurbished replacement parts for repairing its products, at its sole and arbitrary discretion. Seon may replace an entire unit with an equivalent model, at its sole and arbitrary discretion. If a unit is exchanged, the returned

product shall become the property of Seon and the exchange product becomes the property of the purchaser, and the remainder of the warranty that applied to the original unit purchased shall apply to the exchanged product. Exchange units may be new units, or units that have been repaired to full factory specifications, at Seon's discretion. If the product is found to be in good working order or its inability to function properly is not covered by this warranty, the product will be returned in the same condition as received unless repair is possible and requested by the customer. Repairs of such nature will incur a charge for parts and labor and will proceed only by agreement with the customer to accept the charge.

This warranty shall not apply:

- (a) to equipment not supplied by Seon;
- (b) to equipment, including, any components, which shall have been operated in excess of rated capacity, subject to negligence, accident, or damage by circumstances beyond Seon's control, or to improper installation, operation, maintenance, servicing, alterations or storage, modification without Seon's written authorization, misuse, vandalism, fire, floods or acts of nature so as, in Seon's exclusive and arbitrary judgment, to affect the same adversely;
- (c) if the serial number for the product has been altered in any way; or
- (d) if the product has been operated outside of the specified Operating Environment specified in the Seon Users Manual for such product.

Disclaimer

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATIONS, WARRANTIES, GUARANTEES AND CONDITIONS, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE AND WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, SEON EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY, DURABILITY OR FITNESS FOR PURPOSE AND ANY WARRANTIES OR MODIFIED WARRANTIES ARISING FROM USAGE OF TRADE OR COURSE OF DEALING.

Any description of the goods or services, whether in writing or made orally by Seon or Seon's agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with customer's order are for the sole purpose of identifying the goods and/or services and shall not be construed as an express warranty. Any suggestions by Seon or Seon's agents regarding use, applications or suitability of the goods and/or services shall not be construed as an express warranty unless confirmed to be such in writing by Seon. Purchaser assumes full responsibility for selecting products to achieve purchaser's intended purposes, for properly installing and using those products, and for verifying the results obtained therefrom.

PURCHASER'S EXCLUSIVE REMEDY AND SEON'S ENTIRE LIABILITY
ARISING FROM OR IN CONNECTION WITH PURCHASER'S USE OF
THE PRODUCTS AND/OR THIS AGREEMENT SHALL BE REPAIR OR
REPLACEMENT OF DEFECTIVE PRODUCTS, OR REFUND OR CREDIT OF THE
PURCHASE PRICE OF THE PRODUCTS AS SET FORTH ABOVE. SEON SHALL
NOT BE SUBJECT TO AND DISCLAIMS: (A) ANY OTHER OBLIGATIONS OR
LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY,
(B) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS
(INCLUDING NEGLIGENCE, AND STRICT LIABILITY) OR ARISING UNDER
OTHER THEORIES OF LAW WITH RESPECT TO GOODS SOLD OR SERVICES
RENDERED BY SEON, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS
RELATING THERETO, AND (C) ALL CONSEQUENTIAL, INCIDENTAL, SPECIAL
AND CONTINGENT DAMAGES WHATSOEVER, EVEN IF SEON HAS BEEN
SPECIFICALLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Without limiting the generality of the foregoing, Seon specifically disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits or revenues, loss of use of goods or any associated equipment, cost of capital, cost of substitute goods, facilities or services, down-time, shut-down or slow-down costs, or for any other types of economic loss, and for claims of customer's customers or any third party for any such damages. Some jurisdictions do not allow limitation or exclusion of incidental or consequential damages, so this limitation or exclusion may not apply to purchaser. In no event shall Seon's total liability for any damages to purchaser or any other person in connection with the products or this agreement exceed the lower of the suggested list price or the actual price paid for the products, regardless of whether such liability arises from contract, tort, warranty or any other form of claim. If any provision of this agreement is found to be void, invalid, or unenforceable, that finding shall not affect the remaining provisions, all of which shall be enforced to the full extent permitted by law. If any remedy hereunder is determined to have failed of its essential purpose, the limitations of liability and exclusion of damages set forth above shall remain in full force and effect. This agreement may be modified only by a writing signed by a duly authorized representative of Seon.

Provisions Applicable to American Customers

For those customers whose mailing address is in the United States, Seon's offer and any agreement of sale resulting therefrom shall be governed by and construed in accordance with the internal and domestic laws of the State of WASHINGTON without giving effect to the conflict of laws rules thereof. The Superior Court of Washington for Whatcom County and U.S. District Court for the Western District of Washington ("the U.S. Closed Courts") shall have exclusive jurisdiction to entertain and determine all disputes and claims, whether for specific performance, injunction, declaration or otherwise arising out of or in any way connected with the construction, breach, or alleged, threatened or anticipated breach of the contract resulting from this offer and shall have jurisdiction to hear and determine all questions as to the validity, existence or enforceability thereof. Customer specifically consents to such Court's exercise of jurisdiction over it. The purchaser attorns to the exclusive jurisdictions of the jurisdiction of the U.S. Closed Courts, waives any obligation

to venue in any action or proceeding regarding Seon Products and waives any objection that the U.S. Closed Courts are an inconvenient forum or do not have jurisdiction over the purchaser of Seon. The United Nations Convention On Contracts For The International Sale Of Goods shall not apply.

Provisions Applicable to Canadian Customers

For those customers whose mailing address is in Canada, Seon's offer and any agreement of sale resulting therefrom shall be governed by and construed in accordance with the internal and domestic laws of the Province of BRITISH COLUMBIA and the laws of Canada applicable therein without giving effect to the conflict of laws rules thereof. The courts of British Columbia (the "Canadian Closed Courts") shall have exclusive jurisdiction to entertain and determine all disputes and claims, whether for specific performance, injunction, declaration or otherwise arising out of or in any way connected with the construction, breach, or alleged, threatened or anticipated breach of the contract resulting from this offer and shall have jurisdiction to hear and determine all questions as to the validity, existence or enforceability thereof. The purchaser attorns to the exclusive jurisdictions of the jurisdiction of the Canadian Closed Courts, waives any obligation to venue in any action or proceeding regarding Seon Products and waives any objection that the Canadian Closed Courts are an inconvenient forum or do not have jurisdiction over the purchaser of Seon. The United Nations Convention On Contracts For The International Sale Of Goods shall not apply.

The information contained herein is subject to change without notice.

Extended Warranty for Certain Products

The following extended warranty ("Extended Warranty") provisions apply to the products ("Extended Warranty Products") listed in the attached Schedule A if the purchaser thereof has purchased the Extended Warranty from Seon. If any provisions of the Extended Warranty conflict or are inconsistent with the provisions of the basic warranty set forth above, the provisions of the Extended Warranty shall govern.

Seon warrants the Extended Warranty Products against defects in workmanship and materials provided that such defects appear or are discovered within the extended warranty period set forth in Schedule A for the relevant Extended Warranty Product and provided further that the purchaser of such products notifies Seon of such defects within 30 days of the appearance or discovery of such defects.

Under the Extended Warranty:

- (a) Seon will provide repairs to the Extended Warranty Product at no extra charge during the Extended Warranty period;
- (b) normal wear and tear IS covered, including replacement of hard drives if necessary;
- (c) the parts and labor required to complete all warranted repairs are included;
- (d) Seon will arrange and pay the cost of ground freight between Seon's service facilities in Blaine, Washington, U.S.A. (or such other location as may be designated by Seon) and purchaser's location; and
- (e) Seon will pay freight, brokerage and duty costs to bring the goods to Canada, if required, in the sole and arbitrary opinion of Seon.

In addition to the telephone numbers provided above for reporting a warranty matter, purchasers of Extended Warranty products may report warranty matters by e-mail to Seon at: service@seon.com.

The purchaser reporting an Extended Warranty issue may request Seon to arrange for pick up of the Extended Warranty Products and shall provide information as to the number of parcels and shall request a RETURN AUTHORIZATION (RA) NUMBER.

Seon will only be responsible for the cost of ground freight. Any additional costs for express modes of freight will be paid by the purchaser of the Extended Warranty Product. Advance replacements will not be provided.

A renewal or extension of the Extended Warranty is not automatic and will only be offered at the sole discretion of Seon and must be verified by Seon in writing.

At Seon Design Inc., our solutions are designed to meet the real-world challenges of the school bus industry. Understanding these challenges means listening is fundamental. Feedback from our customers directly influences the design and engineering of our products, ensuring that we meet our client's present and future needs.

Built right here in North America, Seon's solutions are designed to meet the specific needs of customers, and they are serviced by teams of dedicated specialists. When you partner with Seon, our experts are available on-demand to handle every aspect of the installation and support process. We have Wi-Fi and IT specialists standing-by to train your employees and address your networking and software needs.

At Seon, our knowledgeable office support staff are always waiting to pick up the phone. Customer satisfaction is paramount, making Seon the most trusted partner in the mobile surveillance industry.



