



MOBILE VIDEO SURVEILLANCE

SCHOOL BUS SOLUTIONS

surveillance highlights

Bus

Commercial Motorcoach

> **School** Transit

Commercial Truck

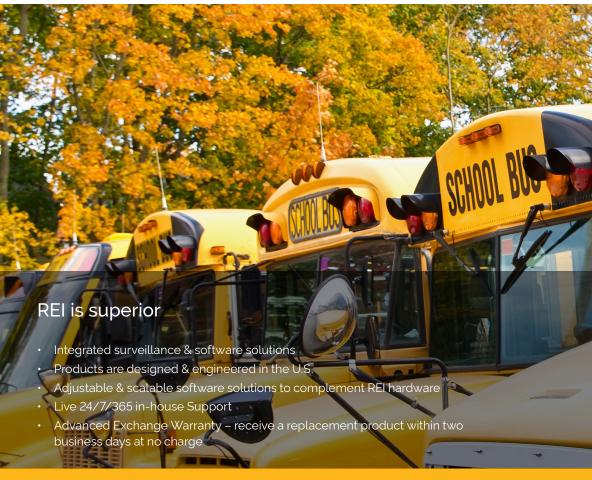
Delivery Fleet Waste/Refuse

Emergency Vehicle

Ambulance Fire Truck Mobile Command Police

> Agriculture Construction Dealers

> > OEM



CONTENTS

DVRs
CAMERAS
STOP-ARM SOLUTIONS 6
VIDEO MANAGEMENT SOFTWARE 7
ARMOR™ SOFTWARE SUITE 8-9
ADAS
ACCESSORIES

elevate fleet safety & operational efficiency with an all-in-one solutions provider for the school bus industry



Triple-Stream Technology

Record views in three resolutions simultaneously and easily balance video quality and storage space with REI's Record Time Estimator.

Wireless Setup

Program interior and exterior views wirelessly with REI's DVR Tool Kit app; a smartphone, tablet or laptop; and optional Wi-Fi Dongle. Establish perfect camera angles and turn cameras on/off while moving freely around your vehicles.

Better Bit Rate

Higher bit rates lead to sharper images, enhanced colors and exceptional resolutions. REI offers the highest bit rate in the industry.



DVRs & cameras

DVRs

HD6 Series 6-Channel





HD6 Series 12-Channel





Record and retain high-definition proof of events. REI's lightweight, durable DVRs capture crystal-clear video and audio, providing indisputable details. Among their innovative features is an optional, internal cellular modem. Connect up to 12 cameras to capture stunning surveillance views from your school buses.

Versatile – connect up to 12 HD cameras for interior and exterior views

Enhanced clarity – see small details with up to 1080p HD video available on all channels

Durable – vibration dampening integrated into hard-drive housing

User-friendly – configure for iOS or Android™ handheld devices

Dependable – operate to -40° F with integrated heater

Secure – maintain privacy with optional front and rear covers

Safe – consistent, regulated power to all cameras, external devices and peripherals

Integrative – optional built-in cellular router eliminates the need for add-on router

Fast – upgrade to solid-state drive for improved performance

Features

ULTRA

HD



up to 1080p HD video on all channels

(4)

11

internal

cellular modem

(optional)

30 FPS

full-frame rate

up to 30 fps/channel





fast 802.11ac Wi-Fi

(optional)

H.264/H.265



panic/event marker

accelerometer (built-in)



triple-streaming

up to 512 GB SD card (optional)



lockbox (built-in or optional)



up to 4 TB hard drive or

solid-state hard drive

extruded aluminum chassis



((•)) eight sensor

triggers

Top-Selling Cameras



Eyeball AHD

Mini Box AHD



Mini Dome IP or AHD





Windshield-

Mount AHD or IP



Mini Eyeball AHD (surface-

or recessed-mount)



Back-Up Camera



Stop-Arm AHD

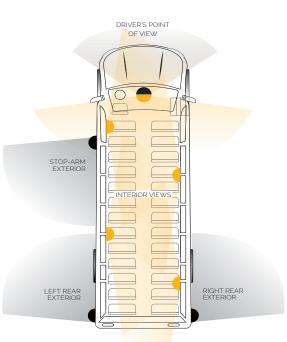
REI cameras deliver stunning images from any angle. Choose from a variety of high-resolution styles, focal lengths and fields of view. From narrow 21° cameras for capturing license plates to 180° models for capturing everything between bus seats, REI has color cameras to attain whatever views are needed.



Middle Seat Views



Driver's Point of View



Driver's Area, Stairwell, Front Seats



Rear Seat Views

Features

- Sharp HD views in 720p & 1080p
- Up to 180° horizontal & 90° vertical views
- · Capture both sides of bus, wheelchair-lift zones & tie-down areas
- · Driver's POV & exterior views
- · Nighttime views with IR



Front Seat Views

stop-arm solutions

Manual

Capture violators' license plates easily, reliably and in high definition with REI's manual stop-arm solution. The solution is activated by a driver using a simple panic/event marker. Flagged images and data may be reviewed within our Video Management Software (VMS) or ARMOR Software Suite™.



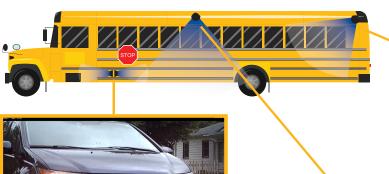


Components

- .
 - DVR

· Panic/event marker

- Side-Mount Stop-Arm AHD cameras
 GPS receiver
 - 20' sensor harness
 - Video Management Software (VMS)





overhead view of violation



Al Stop-Arm Violation Camera (Automated solutions only)

- No panic button/driver involvement
- Promotes more focused driving
- Compatible with new/existing license plate capture cameras

rear license plate view

Automated

Automate the detection of illegal passing incidents with our AI Stop-Arm Violation Camera. While a stop arm is deployed, the camera sees vehicles enter its detection zone and simultaneously triggers your camera system's DVR to flag the events. HD videos may be viewed, verified and distributed within the required ARMOR™ Software Suite.

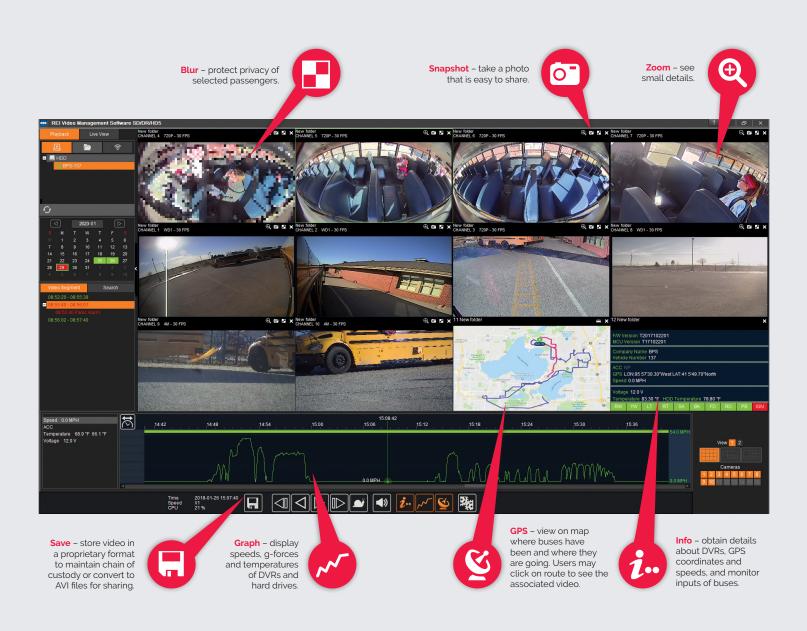


Contact us to find the best stop-arm solutions for your operation. All components are sold separately.

video/data management

VMS is the foundation of our mobile video surveillance solution. The software enables you to search and view recorded events and provides access to vehicle data. It is complimentary with your mobile video surveillance package.

VMS



safety through innovation

6

surveillance software

ARMOR™ Software Suite

How It Works



Your school bus is equipped with a Wi-Fi or cellular DVR, or cellular router.

Recorded events and metadata are transferred to access points when your vehicle returns to the lot, or by a cell tower right after the incidents occur or at preconfigured times.





Video and metadata are stored on a local server or in ARMOR Cloud.

Server data may be accessed with computers and/or wirelessly via handheld devices.



ARMOR Modules

Administration – establish users, credentials and notifications

Dashboard - monitor events, select reports and analyze data

AutoPilot – review video events/reports and request automatic video downloads

Diagnostics – monitor health of REI equipment and your vehicles

Insight – track historical routes and current locations of fleet vehicles

Live - monitor audio and video from multiple vehicles en route



Automate and simplify fleet management with our web-based software solution. Access its innovative, adjustable modules wirelessly to set up and monitor fleet details using internet-connected devices.

For added convenience, REI offers ARMOR™ Cloud, an optional server management service. ARMOR data, software updates and scalability are maintained for you by REI.



ARMOR screen images may change based on customer input & feedback.

Mobile Cellular Wi-Fi Routers



Wi-Fi connectivity is essential for student and operational efficiency. Install REI Mobile Cellular Wi-Fi Routers for fast, reliable Wi-Fi access to:

- Extend classroom learning
- · Allow students to make efficient use of travel time
- Monitor fleet management tools with live surveillance views and GPS capabilities

Our dual-SIM routers provide two cellular service options to offer flexibility and stable connections for students and your operation. If a connection to one provider fails, the router auto-switches to the alternate service provider. As a result, uptime for your operation and students is maximized.

upgrade to ARMOR

REI's Video Management Software (VMS) is complimentary with a mobile video surveillance package and enables you to easily search for and view recorded events, track historical bus routes and more.

ARMOR™ Software Suite is an expansion of our VMS and provides advanced features for fleet management. More importantly, it automates the entire process to save time and money for your operation.

Increase Productivity Improve Efficiency Save Time & Money Maintain Peace of Mind

	VMS	ARMAR Software Suite
Individual school bus & fleet data	1	\checkmark
View on PC through hard drive, SD card, flash drive or remotely with Wi-Fi or cloud service	\checkmark	\checkmark
Zoom and blur features	\checkmark	\checkmark
Graph speed, acceleration, voltage and temperature	\checkmark	\checkmark
Track up to eight inputs of a vehicle	\checkmark	√
Track excessive acceleration, hard braking or collisions	V	√
Monitor past location and speed of a vehicle	\checkmark	\checkmark
Filter data using 'or'	\checkmark	V
Save clips for later viewing and sharing	\checkmark	√
Automated, remote video downloading		\checkmark
Automated event and diagnostics alerts		\checkmark
Firmware and software upgrade/update notifications		\checkmark
Real-time surveillance view capability		\checkmark
Optional ARMOR server management by REI		\checkmark
Accessible with internet-connected devices		\checkmark
Share video within/outside your operation via password-protected link		\checkmark
Video lock to prevent alteration/deletion		\checkmark
Automated vehicle health checks via J1939 CAN-bus interface		V
Automated health checks of REI surveillance system		V
Configure DVR remotely (feature not available when using a private cellular network)		\checkmark
Real-time bus tracking capability (individual buses, bus groups or entire fleet)		\checkmark
Play back, export or request video using multiple 'and/or' words		\checkmark
Monitor graphs of hard drive and system temperatures, speed, acceleration and voltage		√
Oversee engine hours, fuel levels and odometer readings		\checkmark
Create geofences for individual buses or groups		√
Automated notifications about driver events (speeding, hard braking, stop-arm usage, etc.)		V

Additional hardware is required. Cellular service plans may affect performance. Ask for details.

8

360° HD Camera System

REI's 3D 360° technology offers superior visibility for parking and maneuvering in difficult situations. Its panoramic, bird's-eye and 3D views change automatically based on turn signals and reverse gear.



- Prevent bus damage
- Reduce liability claims
- 720p HD views
- Connect to any monitor

Standard Camera Observation System

Give your school bus drivers an extra set of eyes when backing up or turning. High-definition views are tied to turn signals and reverse gear for added ease in steering through traffic.



- Mini Box Camera (included when system is purchased as a kit)
- Additional camera options available

HD6 ADAS Kit

Help your drivers monitor the road ahead to prevent and mitigate collisions. Equip them with headway, lane departure and forward collision alerts.



- Easy installation (no certified installer needed)
- ARMOR™ Software Suite compatibility
- · Visual and audible alerts
- Record view on HD6 DVR (required)
- Includes 1.44" Driver Display Module and windshield-mount AHD Camera

optional surveillance accessories



Panic/Event Marker

Instantly flag any event, check DVR status and troubleshoot DVR health.

GPS/Wi-Fi/LTE Antennas







Sensor Harness

Monitor up to eight inputs, such as turn signals, brakes and wheelchair lifts, to check their use by drivers.

Accelerometer

Screen and measure hard braking and excessive acceleration incidents.





DVR Security

Add protection from vandalism or other security concerns with heavy-duty covers, end caps or a lockbox.

J1939 CAN-BUS Cable

Conduct health checks of buses and REI equipment to locate/solve intermittent bus problems. ARMOR™ Software Suite is required for J1939 connectivity.





Wi-Fi Dongle

Enable wireless connections from DVRs to handheld devices, program cameras, verify and troubleshoot camera status, confirm proper functioning of DVRs and more.

SD Card

Provide additional video storage for recorded events.



10





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