REI®

MOBILE VIDEO SURVEILLANCE

TRANSIT SOLUTIONS

REI

Bus
Commercial
Motorcoach
School
Transit

Commercial Truck
Delivery
Fleet
Waste/Refuse

Emergency Vehicle
Ambulance
Fire Truck
Mobile Command
Police

Agriculture
Construction
Dealers
OEM

REI is superior

- Products are designed and engineered in the U.S.
- Flexible and scalable software solutions to complement REI hardware
- Live 24/7/365 in-house Support
- Advanced Exchange Warranty – receive a replacement product within two business days at no charge

CONTENTS

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

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.

Triple-Stream Technology

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

REI DVR Tool Kit app

Wi-Fi Dongle

surveillance systems

DVRs

HD6 Series 6-Channel

HD6 Series 12-Channel

Lightweight, durable and designed with innovative features, REI DVRs record crystal-clear video, audio and vehicle data on removable hard drives. Connect up to 12 cameras to capture stunning surveillance views from your transit 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

HD up to 1080p HD video on all channels	**ULTRA HD** 4K UHD IP channels	GPS (optional)
internal cellular modem (optional)	fast 802.11ac Wi-Fi	panic/event marker (optional)
30 FPS full-frame rate up to 30 fps/channel	H.264/H.265 triple-streaming	accelerometer (built-in)
up to 4 TB hard drive or solid-state hard drive	up to 512 GB SD card (optional)	lockbox (built-in or optional)
extruded aluminum chassis	fanless enclosure	eight sensor triggers (optional)

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)

Mini Wedge Back-Up Camera

Mini Eyeball AHD Camera (recessed-mount)

Community Transit Vehicle

22' Passenger Vehicle

40' Passenger Vehicle
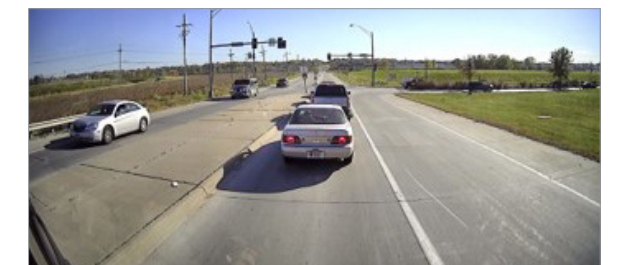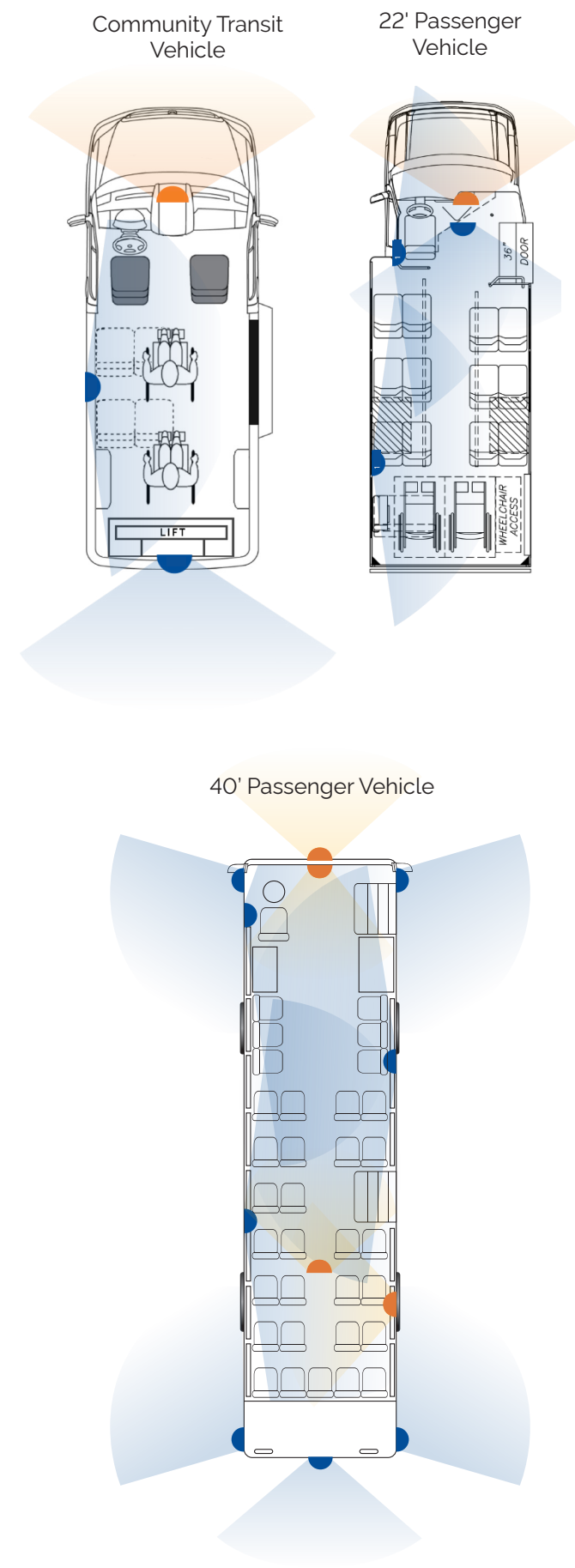
Driver POV

Front Door and Lift View
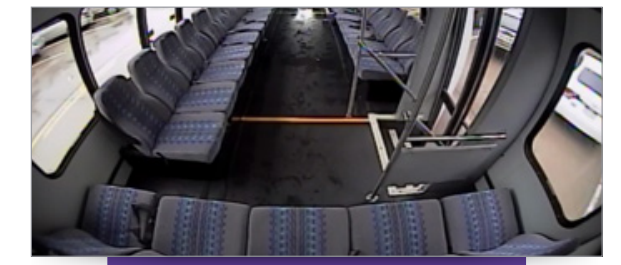
Front View from Rear

Rear View from Front

180˚ Horizontal/90˚ Vertical View

Features

- 720p & 1080p HD views
- Up to 180˚ horizontal & 90˚ vertical views
- Capture both sides of aisle & chair-lift zones
- Nighttime views with optional IR

VMS software

Features

Blur – protect identities and privacy of selected passengers.

Snapshot – take a still image that is easy to share.

Zoom – see small details.

Search – find video through user-selected inputs, such as speeding.

Save – store video in a proprietary format to maintain chain of custody or convert to AVI files for sharing.

Graph – display speeds, g-forces and temperatures of DVRs and hard drives.

GPS – view on map where buses have been and where they are going. Click on a route to see the associated video.

Info – obtain details about DVRs, GPS coordinates and speeds, and monitor inputs of buses.

ARMOR™ Software Suite

How It Works

Your transit 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 & video from multiple vehicles en route

ARMOR™ Software Suite by REI

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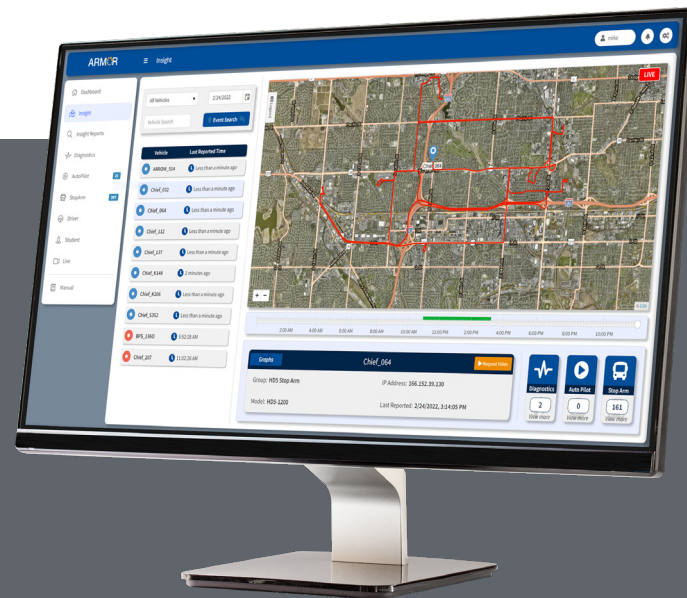
ARMOR screen images may change based on customer input & feedback.

Mobile Cellular Wi-Fi Routers

Wi-Fi connectivity is critical for transit passenger satisfaction and operational efficiency. Install REI Mobile Cellular Wi-Fi Routers to enable fast, reliable access to:

- Passengers' favorite online content, music and entertainment
- Fleet management tools with live surveillance views and GPS capabilities

Our dual-SIM routers provide two cellular service options to provide flexibility and stable connections for passengers 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 passengers is maximized.

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 transit operation.

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

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

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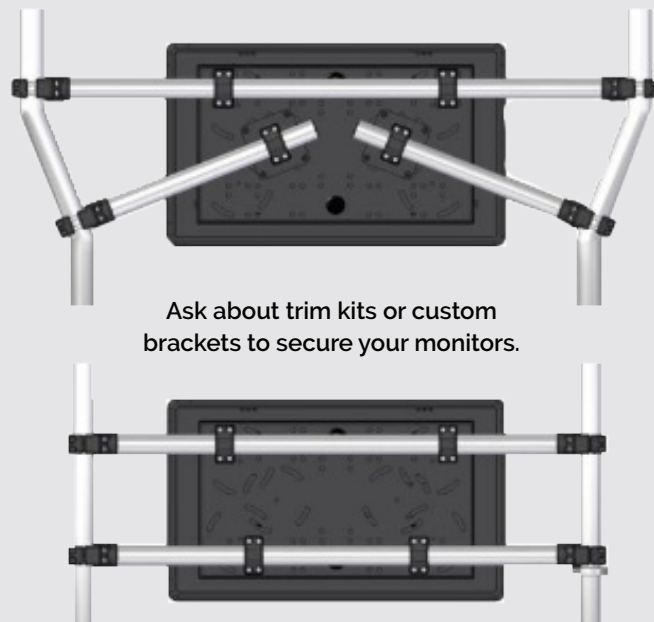
HD monitors

Keep your transit passengers informed with vivid, crystal-clear messages. Several monitor sizes are available to maximize your vehicle's usable space.

- Improve the passenger experience
- Communicate safety messages
- Reduce costs/paper waste with electronic messages
- Strengthen security with live, onboard surveillance views
- Earn revenue via advertising
- Promote transit services

37"
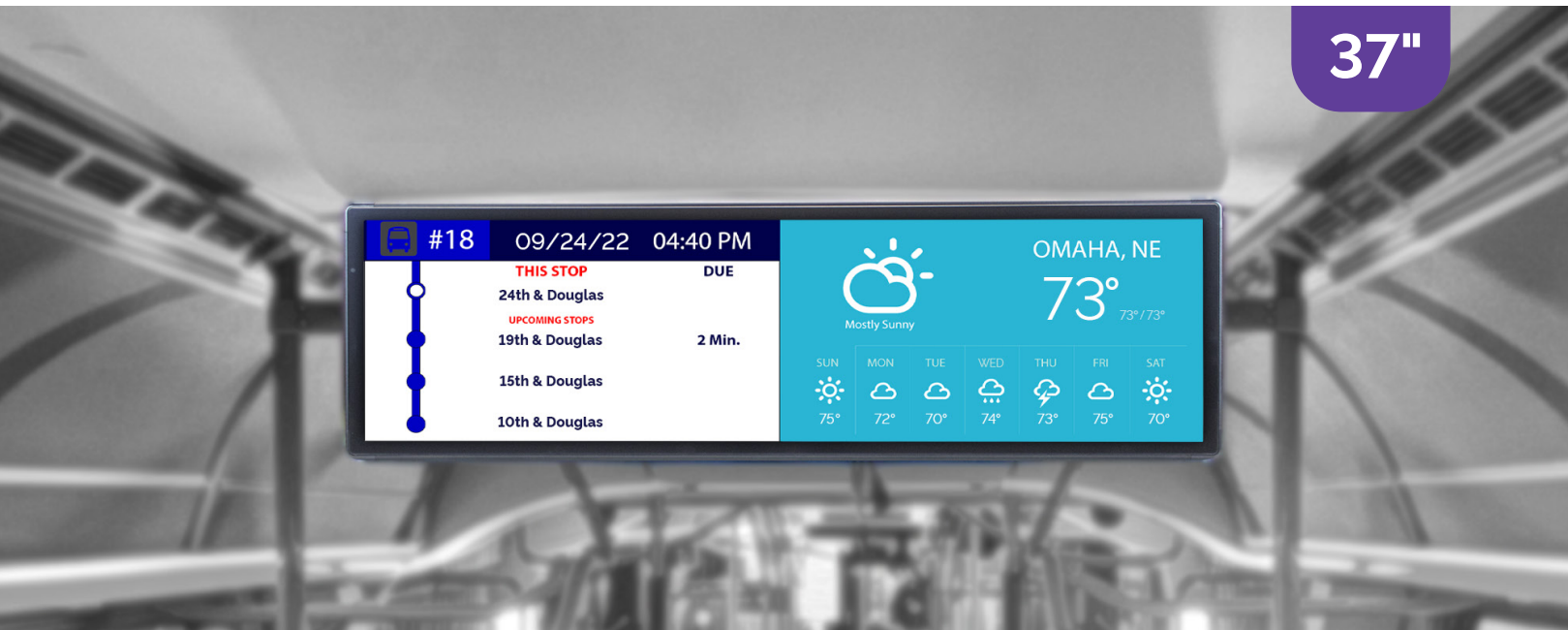
Sizes: 15.6" • 21.5" • 23.8" • 27"

- Wide screen
- LED backlight
- 12/24 volt
- BNC composite video input
- HDMI A video input
- Remote control
- 156°-160° viewing angle

Ask about trim kits or custom brackets to secure your monitors.

HD announcement/media players

Save time for your staff and help passengers stay on schedule with automated messaging by REI Digital Media Players. Each is quality-tested to ensure your safety, advertising and route messages play on time.

Directional GPS Digital Media Player with Priority/Safety Messaging

MP-5000HD

Convenient, automated messaging saves time and effort. Advanced features offer a state-of-the-art passenger experience.

- 200+ GPS points
- DOT-compliant logging
- Multilingual playback
- Event-triggered messaging
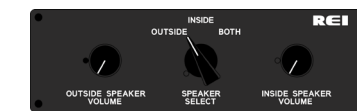- Plays up to five strings of content

PA systems

Notify riders about route and safety details with reliable REI amplifiers, PA systems and microphones. All are quality-tested and engineered to withstand rugged conditions and repeated use.

PA Systems

Amplifiers

wired & wireless microphones

Dynamic Headset Microphone (Hands-Free Use)

Handheld Microphone

Slimline Mini Gooseneck Microphone

Wireless Mic & Charging Station

More microphone styles, extension cables and adapters are available. Ask your sales representative for details.

radios

Power up your onboard entertainment options with versatile, high-quality REI radios. Enable your transit drivers to switch between media sources quickly and easily to meet passenger preferences.

Wide-Screen Multimedia Radio

VR-6200D
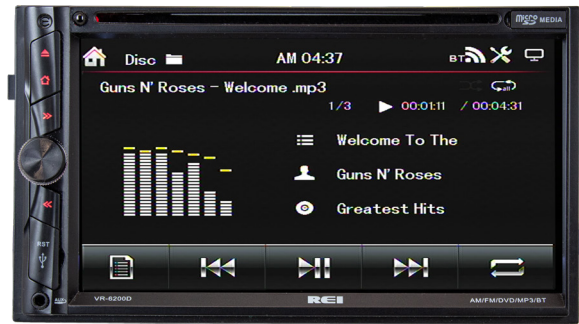
- Bluetooth®
- CD/DVD Player
- PA mic input

Bluetooth® Radio

ST-5050

- Shallow-depth chassis
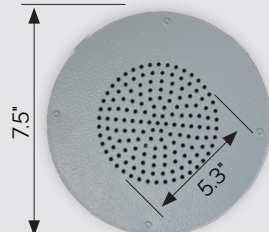- Weather band tuner
- Rear USB input

speakers

Treat your passengers to a theater-like travel experience with crisp, robust sound from REI speakers. Several styles and sizes are available to fit the requirements of your transit buses.

Coax Speakers	Speakers with Grilles	Speakers in Housings	Exterior Speakers

5.580" 2.790"

7.5" 5.3"

optional surveillance accessories

Panic/Event Marker

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

GPS/ Wi-Fi/LTE Antennas

Track and obtain GPS satellite data about buses, their past and current locations, and speeds.

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.

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 transit 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

REI®

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