

- **MOBILE DIGITAL VIDEO RECORDER**
- **4- CHANNEL VIDEO AND AUDIO INPUTS**
- **RECORDING, 720P PER CHANNEL**
- **2-CHANNEL COMPOSITE VIDEO OUTPUTS**
- **H.264 RECORDING STANDARD**
- **FILE BACKUP VIA USB DISK, NETWORK & SD**
- **OPTIONAL MODULE: 4G NETWORKS (LTE) FOR FASTER LIVE VIDEO/RECORDED VIDEO RETRIEVAL**
- **CENTRAL VEHICLE MANAGEMENT SOFTWARE FOR VIDEO ADMINISTRATION AND GOOGLE MAPS LIVE VIEWER**



The MVR9104/3GW is a digital video recorder designed for all mobile applications which includes ground, air, and sea. Our latest innovation far exceeds current industry specifications. It's embedded GPS possesses the ability to identify a vehicle's position with accuracy and is accessible through the DVR's integration with Google Maps and its own Central Vehicle Management Software (CVMS). Built-in shock absorbers prevent damage from heavy terrain and will protect the recorder and its internal components while in motion.

The MVR9104/3GW, uses a 2.5 inch SATA or Solid State Drive, which features faster data transfers and less moving parts, making them more suitable for mobile applications. The device's GPRS (3G) transmission makes it ideal for wireless data transmission and is compatible with most data carriers. An optional 4G functionality is also available for improved data transmission.

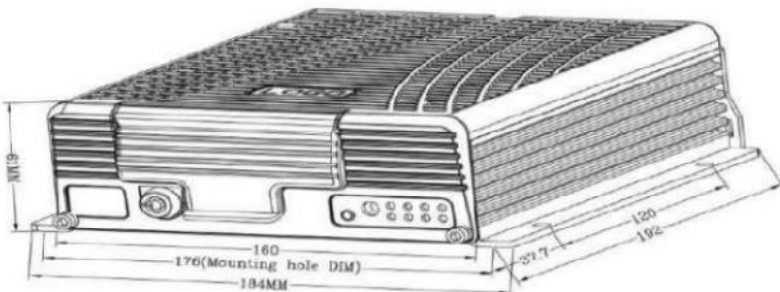
SYSTEM		VIDEO & AUDIO	
IMAGE COMPRESSION	H.264 Main Profile	VIDEO STANDARD	NTSC /PAL
OPERATING SYSTEM (FIRMWARE)	Linux	VIDEO OUTPUT	2 Channels
OPERATION INTERFACE	On screen display menu	VIDEO INPUT	4 Channels
PASSWORD SECURITY	Setting for authorized administrator & user	VIDEO DISPLAY	Single picture, 1-4 Pictures
COMMUNICATION		FRAMES PER SECOND	NTSC: 30 fps@ 720P/ Channels
ETHERNET	RJ45 network interface - 100Mbps for external WiFi module or IPC	VIDEO SIGNAL	PAL/NTSC (PAL@200 frame 720P/sec; NTSC@240 frame 720P/sec)
DATA TRANSMISSION	RS485 interface x3 RS232 interface x1	USB	2 Ports for USB 2.0, front panel: download video files/upgrade firmware. Rear panel: optional.
WIRELESS	GPRS (4G) / EDGE - Requires SIM Card of mobile service supplier HSUPA/HSDPA/WCDMA/EVDO optional or FDD-LTE/TDD-LTE Optional Built in optional modules: 4G(LTE), GPRS/EDGE CDMA	AUDIO BIT RATE	40Kbps
Wi-Fi	Install Wi-Fi 802.11b/g/n(2.4 /5.8 Ghz) opt.	AUDIO COMPRESSION	8KHZ*16bit ADPCM
GPS	Built in module for real time geographic coordinates, speed information	AUDIO INPUT	4 channels
NETWORK FUNCTIONS	Real time Surveillance with Microsoft Internet Explorer, GPS tracking with Bolide's Apps Included and / or Google Maps	AUDIO OUTPUT	1 channel
		RECORD FORMAT	Synchronized video & audio recording
		PLAYBACK RESOLUTION	PAL: CIF (352 X 233) HD1(704X288),D1 (704X576) NTSC: CIF(352X240) HD1(704X240),D1(704 X 480) 720P (1280X720)
		PLAYBACK FUNCTIONS	Normal, fast forward, fast rewind, frame by frame



Front Panel – HDD /SD Storage



Back Panel



General Dimensions

RECORDING & STORAGE

RECORDING SPEED	4 channels 720P recording
BACK UP MODE	USB Flash, USB disk, Network & SD
IMAGE RESOLUTION	CIF/HD1/D1/ 720P
VIDEO CODING	ISO14496-10
STORAGE	2TB Hard Disk
VIDEO BIT RATE	CIF: 1536Kbps ~ 128Kbp HD1/D1: 2048Kbps ~ 400Kbps 960H: 2048Kbps ~ 400Kbps 720P: 4096 ~ 400Kbps Select from 8 levels of Video Image Quality ranging from 1 (lowest) to 8 (highest). Supports 2.5" SATA HDD/SSD Max.2 TB Supports One SD Card Backup when HDD/SSD is error.
HARD DISK INTERFACE	
RECORDING MODES	Always / Calendar / Movement/ Triggered Sensor
RECORDING INTERVAL	15/30/45/60 Minutes Selectable
ALARM INPUT	4 Channels Activated by low voltage (<4V) by high voltage (>4V)
ALARM OUTPUT	1 channel, 12V Output
ALARM MODE	Motion detection, sensor trigger, video loss. HDD error or with no space
USB	1 USB 2.0 for backup and system updates in the front to derive video files & upgrade software Optional in the back to connect waterproof & fireproof "black box" for data recorder

SOFTWARE

SOFTWARE	CMS included for video administration and Google Maps Live Viewer. Central vehicle Management software Platform, it can manage more than 20000 devices at the same time, if needed to manage more units, you can add servers to realize it.
SUPPORTING	Video files playback in PC with analysis of the vehicle status CMSV6 Wireless real-time video& audio monitoring, GPS, alarm, etc.
UPGRADE	Software upgrade through the front USB2.0 interface and SD card

ENVIRONMENT

WORKING TEMPERATURE	-40°C to 80°C / -40F to 176F
AUTOMATIC HEATING	Hard disk low temperature startup, automatic heating
HUMIDITY	10% a 90%
DIMENSIONS	192mm(L) X 184mm (W) x 61mm(H)
MUNICIPAL	Bus, goods van, school bus, police car, escort car, tanker truck etc
G SENSOR	Built In
VIBRATION RESISTANCE	Yes
SHOCK RESISTANCE	Yes

POWER INFORMATION

POWER SUPPLY	8V-36V wide voltage power supply
POWER CONSUMPTION	10-15W



- **GPS Tracking**

Specific location, vehicle information, time, mileage, speed and alarm status show on the map.

- **GEO-Fence**

A GEO-fence can be dynamically generated as in a radius around a point location or a predefined set of boundaries.

- **Text to Speech**

CMSV6 converts normal language text into speech, text will be displayed and broadcasted on terminal screen in vehicle

- **Intercom**

PC user can communicate.

- **Audio Monitoring**

PC user unidirectional monitoring talking / sound in vehicle

- **PTZ Control**

A pan-tilt-zoom camera can be capable of remote directional and zoom through CMSV6, as well as windshield wiper & light control.

- **Video Color Setting**

To set up color brightness, contrast, color sensitivity, saturation, exposure.

- **Tracking Display**

Complete information of vehicle tracking e.g. driving route, location, speed, mileage and remaining fuel volume

Additional highlights of the MVR9104/4GW

Real-time monitoring from the palm of your hand

Supports iOS and Android mobile devices

Video & Audio Monitoring

GPS

Tracking Display

Online Vehicle Status

Video Storage

Picture Snapshot

Satellite Map

PTZ Control

Voice Intercom

Vehicle list Function

To monitor all vehicles status (green/online, red/alarm) support other terminal monitoring device as mobiles MDVR, GPS tracker

Real Time Monitoring

Real-time video, 4 channel display, PTZ control, real time video recording