## Mobile, 4-CH H.264 Digital Video Recorder



www.tomuracctv.com



## Mobile, 4-CH H.264 Digital Video Recorder Features

- Embedded DVRs for all kinds of vehicles, also suitable for safety driving & drive recorder applications
- Compact design
- 4-CH H.264 DVR with sixfold operation record, live, playback, backup, control, &remote access
- H.264 video compression/decompression with configurable quality
- Digital watermark
- Record capabilities Full-D1: 60/50IPS, Half-D1: 120/100IPS, CIF: 120/100IPS
- Playback capabilities Full-D1: 60/50IPS, Half-D1: 120/100IPS, CIF: 120/100IPS
- Realtime live display for all cameras
- 2-way audio capabilities
- Event recording, time-lapse recording or both
- Playback search by time or event (alarm, motion, video loss, acceleration, brake, speed, & left/right turn)
- Smart search & playback
- Intelligent motion detection with programmable area and sensitivity
- 1 SD/SDHC card with storage up to 32GB
- Video/audio backup to USB2.0 storage devices, including pen drive, DVD+RW, DVD+R, and DVD-R
- Ethernet and USB 3G dongle support for remote access through I.E. or proprietary remote
- software, e-mail alarm notification, FTP file storage, remote setup and software upgrade
- Support remote PC with Windows 7, Vista, XP, and 2000
- 1 I.E./Firefox software for unlimited number of DVRs
- Support Google Earth and Google Maps
- Remote access through mobile phone/PDA/Tablet PC with free iPhone/iPad/Android software app.
- Remote controller and mouse operation
- RS-232 for PTZ and keyboard control
- Car speeding pulse input
- Car engine revolution signal input
- Built-in G sensor
- Built-in lithium battery (optional) for recording after power loss
- Optional GPS antenna
- Multi-lingual support for setup and display
- Multi-level password and authentication key protection to ensure high degree of security
- Anti-shock and anti-vibration design
- Moisture-proof design with spray coating
- OCX SDK available for the integration with different applications

## **Specifications**

System	O.S.	Embedded Linux 2.6
	Multiplex	Sixfold operation - simultaneous record, live, playback, backup, control, & remote access
	Certification	FCC, CE, LVDS, etc.
Video	Format	NTSC/EIA or PAL/CCIR
	Input	4-CH, CVBS, 1Vp-p/75ohm
	Main monitor	CVBS x 1, 1Vp-p/75ohm VGA D-SUB 15-pin connector
	3-D de-interlace	Yes
	Loss detection	Yes
	Motion detection	Yes, with configurable detection area & sensitivity
Audio	Input	1, line-in level (100mV-1Vrms)
	Output	1, line-out level (up to 1Vrms)
Record	Compression	Video: H.264 Baseline Profile Audio: ADPCM
	Frame rate (IPS) & Resolution	NTSC - 60 / 720*480, 120 / 720*240, 120 / 360*240 PAL - 50 / 720*576, 100 / 720*288, 100 / 360*288
	Watermark	Yes
	Mode	Manual/Schedule/Alarm/Motion/Acceleration/Brake/ Speed/Left-Right-Turn
	Pre-record time	0 - 10 seconds
	Post-record time	0 - 60 minutes
Display	Resolution	NTSC - 720*480, PAL - 720*576
- F J	Split windows	1/4
	Frame rate	Up to 30 (NTSC) / 25 (PAL) IPS per camera
	Freeze	Yes
	Sequential switch	User adjustable
	Digital Zoom	X2, X4
Playback	Frame rate (IPS) & Resolution	NTSC - 60 / 720*480, 120 / 720*240, 120 / 360*240 PAL - 50 / 720*576, 100 / 720*288, 100 / 360*288
	Search	Smart search, Date/time, Camera, Alarm, Motion, Video Loss, Acceleration, Brake, Speed, & Left/Right Turn
	Operation	Play, Fast Forward, Backward, Pause, Stop, etc. Remote I.E. and HEM can also Print
Storage	SD/SDHC	1, 8-32GB class 10 or above Failure detection & privacy law supported
		Taxare decorated to privately rain supported
	Partitions	Configurable alarm partition size
	Partitions Backup	Configurable alarm partition size  1 USB 2.0 port Self playback for backup files
Alarm		Configurable alarm partition size  1 USB 2.0 port Self playback for backup files  2 contact or TTL/CMOS signal, polarity selectable
Alarm	Backup Input Output	Configurable alarm partition size  1 USB 2.0 port Self playback for backup files  2 contact or TTL/CMOS signal, polarity selectable  1 Normally Open or 1 Normally Closed relay output
Alarm	Input Output Buzzer	Configurable alarm partition size  1 USB 2.0 port Self playback for backup files  2 contact or TTL/CMOS signal, polarity selectable  1 Normally Open or 1 Normally Closed relay output Yes
Alarm	Backup Input Output	Configurable alarm partition size  1 USB 2.0 port Self playback for backup files  2 contact or TTL/CMOS signal, polarity selectable  1 Normally Open or 1 Normally Closed relay output Yes  Sensor input, Video loss, Motion, Speed, Acceleration, Brake (with built-in G sensor), & Left/Right Turn
Alarm	Input Output Buzzer	Configurable alarm partition size  1 USB 2.0 port Self playback for backup files  2 contact or TTL/CMOS signal, polarity selectable  1 Normally Open or 1 Normally Closed relay output Yes Sensor input, Video loss, Motion, Speed, Acceleration,
Alarm	Input Output Buzzer Triggered by	Configurable alarm partition size  1 USB 2.0 port Self playback for backup files  2 contact or TTL/CMOS signal, polarity selectable  1 Normally Open or 1 Normally Closed relay output Yes  Sensor input, Video loss, Motion, Speed, Acceleration, Brake (with built-in G sensor), & Left/Right Turn
	Input Output Buzzer Triggered by Event log	Configurable alarm partition size  1 USB 2.0 port Self playback for backup files  2 contact or TTL/CMOS signal, polarity selectable  1 Normally Open or 1 Normally Closed relay output Yes  Sensor input, Video loss, Motion, Speed, Acceleration, Brake (with built-in G sensor), & Left/Right Turn Yes

		Promoto coftwore un crodo
		& remote software upgrade
		Support Windows 7, Vista, XP, and 2000
		1 I.E./Firefox for multiple DVRs
	E	Configurable HTTP/Control/Data port
	E-mail	Alarm notification to stationary or mobile devices
	FTP	Alarm video/audio file storage
	Video	1/4 split-window & SEQ mode for I.E. and HEM
		Dynamic electronics maps for HEM
		Dual streaming live view
	Audio	Bidirectional
	Protocol	TCP/IP, HTTP, PPPoE, DHCP, DDNS, FTP, TSP
	Remote users	Up to 6 users simultaneously
	Bandwidth	TCP/IP type dynamic sliding window control
	Remote stations	PC, mobile phone, PDA, and/or tablet PC
		With free iPhone/iPad/Android software app.
Control /	I/R	1 I/R remote controller through built-in sensor or wired
GPS / Car		remote sensor
Speed /	RS-232	1 set (3-pin: Tx, Rx, GND)
Engine	GPS	Optional
Revolution	Car speed	2-pin for car speeding pulse input with configurable
		parameters or from GPS
	Engine	2-pin for car engine revolution signal input
	Revolution	
Setup	Local	On screen setup via I/R remote controller and/or mouse
	Remote	Setup & upload via Windows application software
	Multi-lingual	Yes
Reliability	Power loss	Built-in lithium battery (optional) for up to 10 minutes
	protection	of recording after power loss
	System recovery	Auto power on after power loss recovery
	Watch Dog Timer	Yes
	Timer	Built-in real time clock
		Time synchronization with TSP server or GPS
	Security	Multi-level password (3 levels, up to 18 accounts)
	Operating shock	8G, 11ms (20 per five seconds max)
	Operating	5~500Hz, 2.7G rms
	vibration	
	Moisture proof	With spray coating
Weights &	Dimension	118.5(W) x 128(D) x 43.4(H)mm
Measures	Weight	400g
Power	Source	+12 or +24VDC, with acceptable range +9.5~30VDC
	Consumption	6W
	Delay OFF	Yes, with configurable timer
Operating Temperature		$0^{\circ}\text{C} \sim +50^{\circ}\text{C}$ (w/o internal lithium battery)
		$0^{\circ}\text{C} \sim +45^{\circ}\text{C}$ (w/ internal lithium battery) Lithium
		battery will not be charging over 40°C
		ouncij wili not be enuiging ever to e

## Ordering information

DM-1204: Compact Mobile, 4CH H.264 DVR DM-1204G: DM-

1204 with GPS antenna

DM-1204B: DM-1204 with lithium battery