



YMD-104 W

VEHICLE DIGITAL RECORDER

YMD-14 M DVR is designed for 4ch Stand-Alone Type Mobile DVR (Digital Video Recorder) and connectable all kind of vehicles.

Originally designed “three-dimensional Vibration and Shock Protect structure” keeps stable operation from bad road condition and vibration. Automatic Temperature Control System protects from bad weather condition by internal Heater and Blower. It is also designed to use both 12 VDC and 24 VDC. The product fits all kind of vehicles due to its operative input voltage range is 10 VDC ~ 40 VDC.

It is very convenience to change Hard Disk by using Removable Hard Disk Drive. Also it supports various functions of Alarm Sensor, Password and Key Lock.

FEATURES

- **High Stability and Reliability**
- **Internal Three-dimensional Vibration and Shock Protect structure**
- **10V DC ~ 40V DC Available**
- **Removable Hard Drive**
- **Sensor Alarm capability**
- **No Pre-format is required**
- **Key Lock Function**
- **Shutdown Delay Time**
- **Password protection**
- **Motion Detection**
- **TCP/IP Network**

SPECIFICATION

		KMH-104	KMH-104W
VIDEO INPUTS	Video Standard	NTSC (EIA) or PAL (CCIR), automatically detected	
	OUTPUTS	Video Inputs	4 composite inputs, 1 V p-p / 75 ohms
Video Outputs		2 composite output to monitor, 1 V p-p / 75 ohms	
OPERATIONAL	Compression Algorithm	Modified -JPEG	
	Record Quality	Low / Standard / High, user selectable	
	Standard Media	1 removable hard drive (3.5", EIDE / ATA133 interface, 5400~7200 rpm, 120 GB max.)	
	Display Resolution	Full screen: 720 x 480 (NTSC), 720 x 576 (PAL) Quad screen: 360 x 240 (NTSC), 360 x 288 (PAL)	
	Record Resolution	Quad mode: 640 x 224 (NTSC), 640 x 272 (PAL) Each mode: 320 x 112 (NTSC), 320 x 136 (PAL)	
	Display Rate	120 fps (4x30 fps) (NTSC), 100 fps (4x25 fps) (PAL) (fps =fields per second)	
	Record Rate (Max.)	Quad Record: 30 fps (NTSC), 25 fps (PAL) Each Record: 7.5 fps (NTSC), 6.25 fps (PAL)	
	Record Speeds	Quad Record: 30 / 15 / 10 / 7 / 5 / 4 / 3 / 2 / 1 fps (NTSC) 25 / 12 / 8 / 6 / 4 / 3 / 2 / 1 fps (PAL) Each Record: Quad record speed (fps) / camera numbers	
	Playback Speeds	x1, x2, x4, x8, x16, x32, x64, x128, x256 (Forward/Reverse)	
	Record Modes	Continuous / Alarm / Scheduled	
	Search Modes	Time / Camera / Event	
	Record Schedule	User-programmable recording times for each hour of a day	
	Camera Titles	8 alpha numeric	
	Operating Mode	Simplex	
	Alarm Inputs	4 dry contacts, NC/NO programmable	
	Alarm Output	1 relay output (Form C) (Rating: 5 A/30 VDC)	
	Shutdown Delay Time	1 minute ~ 4 hours, user selectable	
Temperature Control	N/A	2 pad heaters and 2 blowers	
CONNECTORS	Signal Connectors	5 BNCs (4 camera inputs and 1 monitor) Female 15-pin D-Sub (4 alarm inputs and 1 relay output)	
	Power Connectors	2 DC power jack (pin dia. 2.0 mm) for monitor power on the front and the rear panel, Female housing 8-pin connector (for power input and power output)	
	Fuse	5A	
ELECTRICAL	Power Input	10 VDC ~ 40 VDC	
	Power Consumption (w/Hard drive) (wo/External power)	On Booting: 36 W max. Nominal: 20 W max.	On Booting: 36 W max. Nominal: 20 W max. (pad heater: 30 W, blower: 2.4 W)
MECHANICAL	Dimensions	222 W x 260 D x 100 H mm (11.4 W x 10.2 D x 3.9 H inch)	
	Weight	Product (no hard drive): 5.2 kg (11.44 lb)	Product (no hard drive): 5.9 kg (13.0 lb)
	Finish	Dark plum enameled steel chassis and cover	
	Rack Mounting Kit	2 L-shaped brackets (included)	
ENVIRONMENTAL	Operating Temperature	5°C to 40°C (41°F to 104°F)	-35°C to 70°C (-31°F to 158°F) (Equal to storage temperature range)
	Storage Temperature	-35°C to 70°C (-31°F to 158°F)	
	Relative Humidity	10% to 80% relative, non-condensing	
REGULATORY	Immunity	FCC and CE (reserved)	
	FCC	Part 15 subpart B, class A	
	EMI	EN55022,1998, class A	

RECORD DURATION (80 GB)

(D=Day, M=Month)

[NTSC]	Video Quality	Record Speed (fps = fields per second)						
		30 fps	15 fps	10 fps	5 fps	4 fps	2 fps	1 fps
Quad Screen	High	1.5D	3.0D	4.5D	9.0D	11.3D	22.5D	1.5M
	Standard	2.0D	4.0D	6.0D	12.0D	15.0D	1.0M	2.0M
	Low	2.4D	4.8D	7.2D	14.4D	18.0D	1.2M	2.4M
Each Screen	High	1.9D	3.8D	5.6D	11.3D	14.1D	0.9M	1.9M
	Standard	2.5D	5.0D	7.5D	15.0D	18.8D	1.3M	2.5M
	Low	3.0D	6.0D	9.0D	18.0D	22.5D	1.5M	3.0M