

Overview



The Mobile Digital Video Recorder (MDVR310-RHD) is designed as the most versatile and rugged mobile video recorder on the market. This small and compact unit is designed to store weeks worth of data on the vehicle while allowing archiving of the data by removing the hard drive or the transfer of the data to a server via wired or wireless connection. This recorder is designed specifically for mobile applications in harsh temperature and high-vibration environments where reliability of the recorded data is critical.

It features a lockable removable rugged 2.5" mobile hard drive for data storage with flash based configuration and operating system for unsurpassed reliability.

Unit Features

- ⊙ Up to 4 standard NTSC video camera inputs
- ⊙ Selectable resolution: MJPEG D1, VGA, 1/4 D1 or 1/4 VGA; Selectable per camera
- ⊙ One-touch-zoom camera control feature
- ⊙ Rugged Aluminum Extrusion construction designed for standard 1 DIN automotive radio slot installation
- ⊙ Records directly to dual 2.5" mobile rated removable hard drive
- ⊙ Lockable removable hard drive bay
- ⊙ Built-in 10/100 Ethernet port
- ⊙ Unparalleled search capability with up to 90x fast forward & review
- ⊙ GPS latitude, longitude and speed as well as 3 axis accelerometer on secondary slide-in card
- ⊙ Synchronization of the unit's time and date with the GPS satellite system
- ⊙ Fast power up time in less than 2 second
- ⊙ 1 NTSC output for live view or playback of any of the 4 input videos
- ⊙ Integrated web-server
- ⊙ Integrated basic FTP command set / FTP server
- ⊙ Integrated proprietary protocol full unit remote control and configuration capabilities through Ethernet
- ⊙ 60 second Pre-event recording
- ⊙ System diagnostics and ability to report these over Ethernet or trigger output
- ⊙ Time synchronization for multi-unit installations (Ethernet)
- ⊙ Record time up to 10 days
- ⊙ Streaming video



(Phase 2: Upgradable to H.264 Video Compression with smaller file sizes for wireless download.)

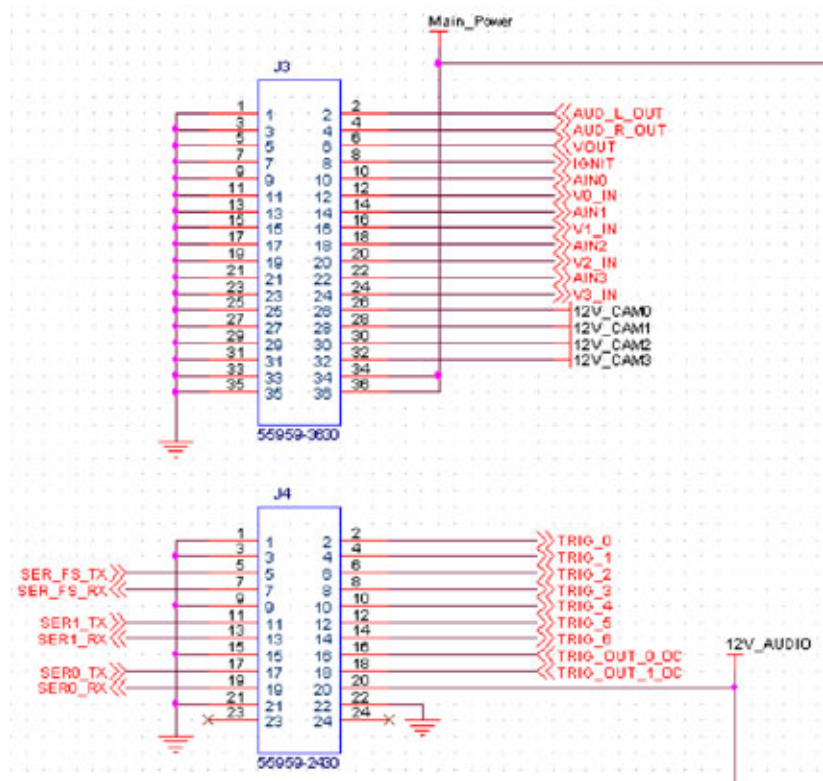
Specifications

<i>Recording Capabilities</i>	4 standard NTSC video camera input at 720 x 240 resolution each with 60 fields per second each (D1) including synchronized audio and meta-data.
<i>Meta-Data Capture for Each Frame</i>	Input voltage, unit temperature, 14 character unit name, panic button events, all triggers status and names, operating mode & version numbers, time & date, GPS lat/long/speed, 3-axis accelerometer data
<i>Compression</i>	MJPEG w/ 32 selectable compression ratios
<i>Resolution</i>	MJPEG D1, VGA, ¼ D1 or ¼ VGA; Selectable per camera
<i>Frame Rate</i>	Selectable 60 fields per sec to 1/8 fps.
<i>Video File Format</i>	Standard AVI file encapsulation which includes all video, audio and meta data streams
<i>Archive Media Type</i>	Dual removable 2.5" IDE mobile rated hard drive from 40GB to 120GB each or 4 SD / SDHC Flash Cards
<i>Real Time Clock</i>	Battery backed up real time clock with DST adjustment and GPS time synchronization
<i>Locked/Secure Design</i>	The unit features password protection with a barrel style removable hard drive lock and SD card lock.
<i>Power Supply Input Rating</i>	Standard automotive power range; 8 – 24 Volts DC
<i>Off Power Consumption</i>	< 12 mA
<i>12V Camera Power Output Max</i>	Four 12V @ ½ Amp regulated switched power outputs for camera supplies
<i>GPS Features</i>	L1, 12-channel continuous tracking receiver.
<i>GPS Acquisition</i>	<50 sec (50%), <84 sec (90%)
<i>GPS Antenna</i>	Compact Magnetic-Mount Antenna with 5-meter length cable.
<i>External Trigger Inputs</i>	7 input triggers plus the ignition trigger
<i>External Signal Outputs</i>	2 Open Collector output
<i>External Interface</i>	RJ-45 10/100 Ethernet, 3 RS-232 Serial Ports
<i>Transient Protection</i>	2,500 Watts for 10ms
<i>Operating Temperature</i>	0 C ~ 50 C (32 F ~ 122 F) ambient temperature for Hard Drive; -20 C ~ 60 C for SD Card version
<i>Operating Vibration</i>	1G @ 5-500 Hz Hard Drive Version > 100G shock for the SD Flash Version
<i>Unit Weight</i>	1.8kg (4.0 lbs.) SD Version
<i>Unit Size</i>	7 in (178 mm) x 2 in (51 mm) x 8 in (203 mm)

Unit Interface

MATE: 51353-3600
PIN: 56134-9000

MATE: 51353-2400
PIN: 56134-9000



Unit Interface Ports (back):

Unit Interface Ports (front):

- ⊙ 4 SDHC Flash Card Connectors (SD Version)
- ⊙ 6 status LEDs (SD Version)
- ⊙ 1 Removable dual 2.5" IDE compatible Hard Drive bay (RHD version)
- ⊙ 2 status LEDs (RHD Version)
- ⊙ 9 buttons for user interface.
- ⊙ Barrel key lock on removable media on both versions.

- ⊙ 36- pin main connector (Molex)
 - + 4 Video Signal Inputs & Grounds.
 - + 2 Main Power In & Grounds in.
 - + 4 Camera Power outs.
 - + Ignition Trigger in.
 - + 2 audio out
 - + 4 audio in
- ⊙ 24-pin secondary connector (Molex)
 - + 7 triggers in
 - + 2 Open Collector trigger outputs
 - + 12V continuous audio power
 - + 3 RS-232 ports
- ⊙ Plug-in Card Connector
 - + SMA GPS connector
 - + 3-axis accelerometer
- ⊙ RJ-45 10/100 Standard Ethernet Connection
- ⊙ MAT