RAPID EYE™ HYBRID HD

www.honeywellvideo.com

16-CHANNEL HYBRID HIGH DEFINITION DIGITAL VIDEO RECORDER (DVR) SYSTEM

HD

The Rapid Eye™ Hybrid HD 16-channel DVR is designed for effective remote access, even over limited bandwidth. The fast and responsive network connection allows instant access to critical site information as you need it. Rapid Eye can record, search and transmit video (analog and IP), audio and data transactions while simultaneously providing users with both live monitoring and post-event playback operation.

Rapid Eye Hybrid HD is fully integrated with the Honeywell suite of security products: MAXPRO® VMS, access control and intrusion. From standalone remote systems to fully integrated enterprise solutions, Rapid Eye is effective in a wide range of security installations.

Rapid Eye uses a Linux-based operating system—running on a solid state hard drive—that is extremely secure, stable and reliable. Standard storage capacities range from 500 GB to 1 TB, field expandable up to 4 TB. The Rapid Clip feature makes remote clip generation to a USB device or the internal DVD-RW fast and easy.

For increased alarm verification and superior false alarm reduction, the Rapid Eye™ Active Alert® option incorporates 8 channels of intelligent video analytics with standard Rapid Eye functionality into one robust platform.

Rapid Eye™ Report provides customized health and business reporting across the entire system to ensure that nothing is missed.

Market Opportunities

The Rapid Eye Hybrid HD seamlessly integrates with Honeywell's WIN-PAK® SE, WIN-PAK® PE, NetAXS® and Pro-Watch® access control software platforms as well as MAXPRO® VMS, making Rapid Eye a scalable and powerful solution that's easy to deploy. For retail markets, its built-in data capture capability makes it extremely useful as a loss prevention analysis tool. Rapid Eye is also PCI compliant and certified for use in data capture environments. Whether the market is commercial, industrial, municipal, financial, or retail, when the need includes remote video surveillance, the solution is Rapid Eye Hybrid HD.
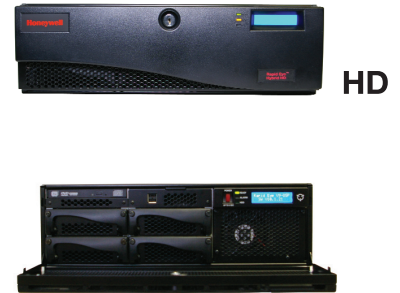
Features

Hardware

- Hybrid support for up to a combined total of 16 video channels of analog and IP cameras
- IP camera support for up to 16 equIP® v2, equIP 1080P, equIP Wide Dynamic Range IP, equIP H.264 and/or Performance Series IP cameras on Rapid Eye Hybrid HD units
- Real-time recording rates (NTSC/PAL)
- Up to 4CIF analog camera recording and/or viewing resolution
- IP camera maximum recording and viewing resolution is 1920x1080 (HD)
- Live viewing using LocalView
- DVD-RW drive for local clip generation
- 16 looping video inputs
- Dual audio channels (Bi-directional and VoIP)
- 16 alarm inputs, 8 control outputs, 8 serial ports
- Four field-replaceable/removable hard drive trays
- LINUX – secure, stable, multi-tasking real-time OS running on a solid state hard drive
- Two front panel USB ports for quick and easy access

Software

- Analog camera resolutions: selectable independently per camera, for live and recording
- IP Camera resolutions: selectable per camera, live and recording resolutions are the same
- IP camera images per second: 5 IPS at HD (720P) per one IP channel, or 80 IPS at HD for all 16 channels
- Automatic discovery of IP cameras on the network
- Event-driven response recording
- Daily or immediate emailing of alarms to designated recipients
- Digital zooming on analog and IP camera video in the Remote View application
- Smart VMD available for analog cameras
- TCP/IP port forwarding – multiple units share an IP address
- DHCP (requires DHCP Server and WINS/DNS services)
- SNTP client automatically synchronizes to SNTP servers
- RapidSearch™ for video evidence by events, data, motion or alarm
- IntelliBus™ protocol support

RAPID EYE™ HYBRID HD

FEATURES

The system consists of three major components:
- **Digital Video Recorder** (DVR), featuring real-time recording at CIF resolution and **LocalView** interface
- **ADMIN Software**, the workstation/server-based administration tool capable of enterprise-wide site and user management
- **VIEW Software**, a feature-rich, workstation-based remote operator program

The combination of ADMIN and VIEW software with the powerful DVR truly differentiates the Rapid Eye system from the competition.

LocalView

- Real-time live video – display a single camera or all 16 cameras simultaneously

- PTZ control – Vector driven within a video stream or full featured with a PTZ controller

- Interactive user-controllable accelerated recording rates (boosted recording)

- Ability to switch the language on user logon to a preset language

- Public Display mode provides a simple cost-effective solution for public view monitoring

- Review recorded video, audio and data

- Easy creation of evidence clips using the Rapid Clip tab then exporting the clips to a DVD, CD, and/or USB memory dongle

- Review evidence clips using the Clip Player tab

- Basic system and camera configurations can be defined using the System tab

- Multiple levels of password protected user access and control

ADMIN Software

HRM10ADMIN (single license included with DVR, can also be ordered separately)

- Capable of enterprise-wide site, user, tour and alarm station management

- Windows®-based administration software has a user-friendly GUI to create the Rapid Eye database

- Can be hosted on a network server using common networked database protocols such as Access, SQL or MSDE

- Makes controlling and administering a multi-site, multi-user, enterprise-wide system fast, easy and secure

VIEW Software

HRM10VIEW (single license included with DVR, can also be ordered separately)

- Feature rich, Windows®-based operator software has a user-friendly GUI for complete remote operations and configuration of one or many different DVRs simultaneously

- Observe and monitor live or recorded video, audio and data from any DVR listed in the Sites tab. Connect to multiple sites simultaneously using multiple methods from the same or multiple workstations

- Connect to the same DVR site using multiple connection methods

- Supports LAN/WAN networks and dial-up connections with TCP/IP protocol

- Control multiple PTZ cameras, monitor two independent 2-way audio channels, monitor up to 16 streams of POS, ATM and/or alarm panel generated data, configure 16 alarm inputs and control eight auxiliary outputs – all from within a single VIEW session
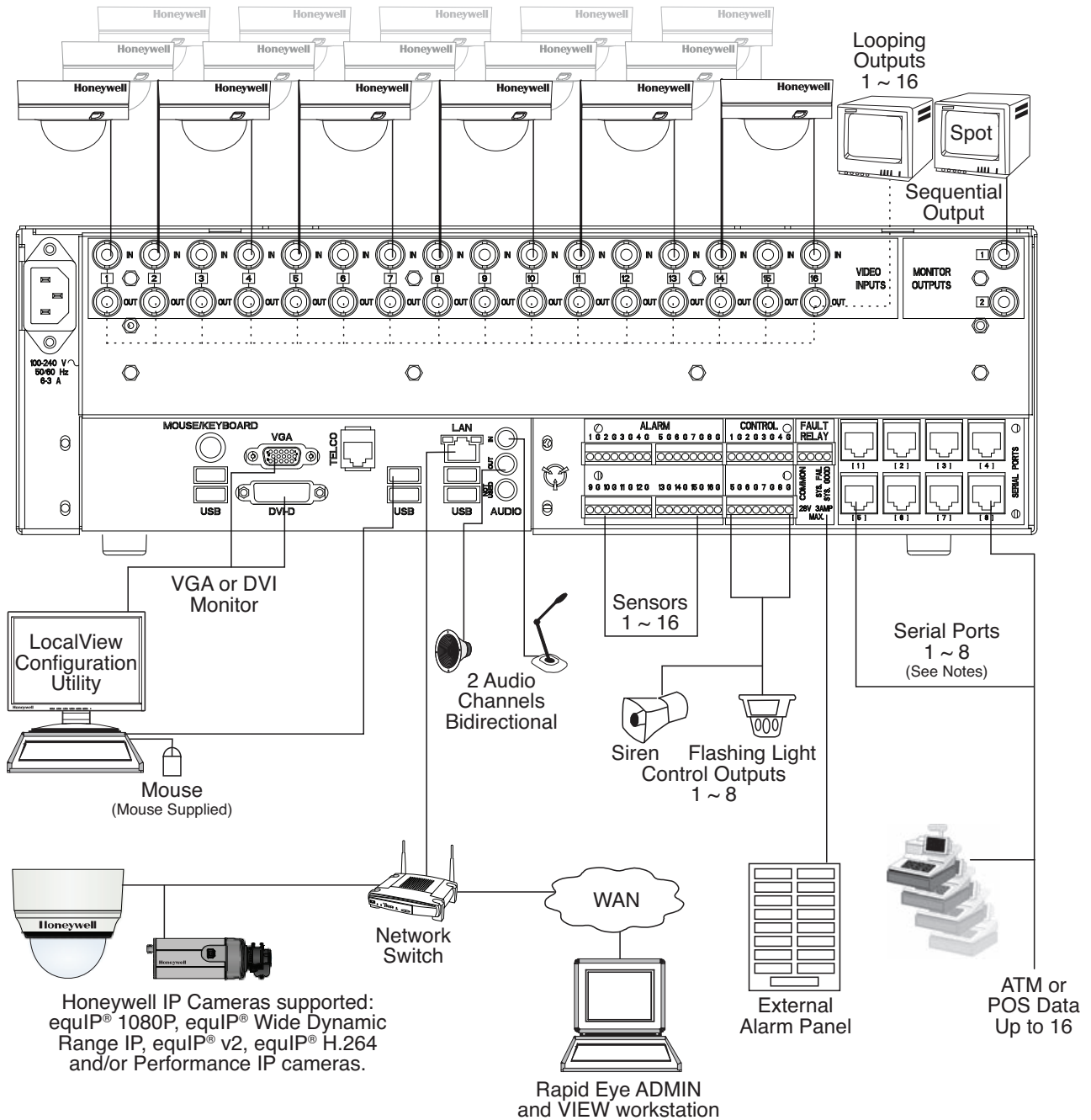
ADMIN and VIEW Workstation Requirements (Minimum requirements)

- IBM-compatible PC

- Windows® 7, Windows® XP or Windows® 2000

- 2.4 GHz Dual Core processor or above

- 4 GB RAM

- 200 MB of free hard disk space, plus adequate storage for video clips

- CD-ROM (for software installation and upgrades)

- Video card(s) and monitor(s) that support XGA mode 1280x1024 or SVGA mode 800x600 (minimum)

- Mouse or other compatible pointing device

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SYSTEM DIAGRAM

Looping Outputs 1 ~ 16

Spot

Sequential Output

VGA or DVI Monitor

LocalView Configuration Utility

Mouse
(Mouse Supplied)

2 Audio Channels Bidirectional

Sensors 1 ~ 16

Siren   Flashing Light Control Outputs 1 ~ 8

Serial Ports 1 ~ 8
(See Notes)

WAN

Network Switch

Honeywell IP Cameras supported: equIP® 1080P, equIP® Wide Dynamic Range IP, equIP® v2, equIP® H.264 and/or Performance IP cameras.

Rapid Eye ADMIN and VIEW workstation

External Alarm Panel

ATM or POS Data Up to 16

SYSTEM DIAGRAM NOTES

Serial Ports 1-8:

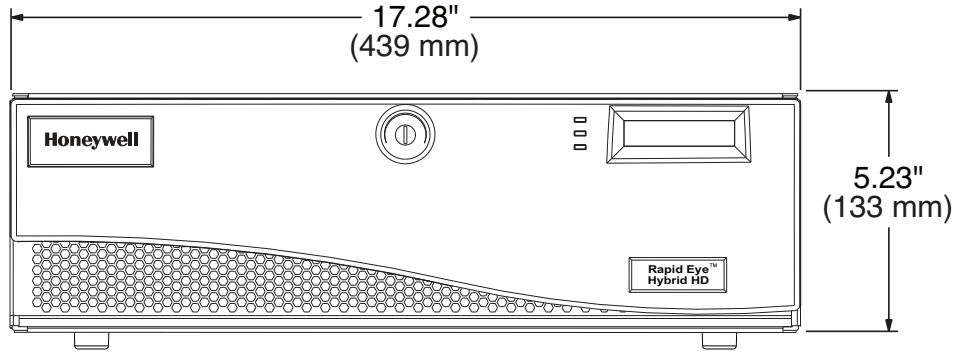RJ-45 RS232/RS422/RS485 individually user-configurable; used for data input, external modem or PTZ control

RAPID EYE™ HYBRID HD

SPECIFICATIONS

Rapid Eye VIEW Software	
Site Connections per PC	64 sites
Video Streams per PC	1024 streams
Sessions Maximum per DVR	Live Video (all users) 32 streams
Users Viewing Live Video (and activating outputs)	10 sessions
Users Retrieving Video	10 sessions
Users Accessing Events	10 sessions
Users Accessing Alarms	10 sessions
Users Accessing Maintenance	1 session

DVR Unit	
Video Standard	NTSC/EIA or PAL/CCIR
Analog Video Format	160x120, 320x240, 640x240, 640x480, 704x480 (NTSC) 192x144, 384x288, 704x288, 704x576 (PAL)
IP Video Format	320x180, 352x240, 640x360, 704x240, 704x480, 800x450, 1280x720, 1920x1080
IP Camera Support	Up to 16 equIP v2, equIP 1080P, equIP Wide Dynamic Range IP, equIP H.264, and/or Performance Series IP cameras
Colors	24-bit true color
Recording and Transmission Compression Algorithm	Modified H.261/263 (REM proprietary) IP camera codec (MPEG4 & H.264)
Record Mode	(FIFO) Continuous buffer
Recording Capacity	500 GB – 1 TB Std. expandable up to 4 TB (up to 3 TB for Rapid Eye Active Alert units)
Recording Rate	480/400 CIF global (NTSC/PAL), or 120/100 CIF global (NTSC/PAL) 80 HD global (NTSC/PAL)
Video Quality Settings	6-10 (low-high)
Video Motion Detection	Configurable to sense mass and motion within multiple regions of interest
Video Motion Search	Configurable post-event motion search within multiple regions of interest
POS/ATM or Alarm Data	16 Streams (max)
Event Recording and Reporting	Session, System, Inputs, Outputs, Video, Motion and POS/ATM data
Mass Storage	Power Off "Cold Swap" 4 field-upgradeable hard drive bays
Removable Media	Optional DVD-RW
Front Panel Control and Display Module (lockable front panel)	Power Switch 3 Status LEDs 2 x 16 Status LCD
SNTP Client	Synchronize DVR to SNTP servers
DHCP Enabled	Network support for DHCP, WINS or DNS name servers
TCP/IP Port Forwarding	Multiple DVRs share same IP Address
USB 2.0 Ports	6 total (2 in front panel; 4 in rear panel)

PTZ Dome Control	
Local	Mouse control only
Remote	Mouse control and configuration
Protocols Support	7 major protocols, Over 50 using Bossware (requires additional hardware)

Rear Panel Connections	
Video Input (Analog)	16 – Looping, BNC 1.0 – Vp-p @ 75 Ohms
Video Output	1 – Spot or switcher, BNC 1.0 – Vp-p @ 75 Ohms
Audio Input/Output	2 – Line level, 3.5 mm jack
Alarm/Control Inputs	16 – TTL or 12V level compatible User-configurable NO, NC, EOL 3.5 mm terminal block
General Purpose Control Outputs	8 – TTL or 12V open collector TTL @ +15 mA /-100 mA 12V @ -100 mA current sink 3.5 mm terminal block
Fault Relay	DPDT Form C relay 28 V, 3 A
Serial Ports	8 – RJ45
Modem/Telco	V.90 multi-protocol Standard RJ-11 Interface
Networking	10/100 base T Ethernet, Standard RJ45 Interface
VGA or DVI Output	1024x768 monitor LocalView Interface
AC Power	100-240 VAC 50/60 Hz IEC-320 connector Regional power cord included

Electrical	
Input Voltage	100-240 VAC, 60/50 Hz
Operating Voltage	120V/240V Auto-sensing
Power Consumption	350 W (maximum)

Mechanical	
Dimensions (W x H x D)	17.28" x 5.23" (3U) x 20.85" (440 x 133 x 530 mm)
Weight	Unit: 43 lb (19.5 kg) Shipping: 51 lb (23 kg)
Construction	Housing: Steel chassis Finish: Black matte paint

Environmental	
Temperature	Operating: 40°F to 105°F (5°C to 40°C) Storage: 14°F to 150°F (-10°C to 65°C)
Relative Humidity	Operating: 0%-90%, non-condensing

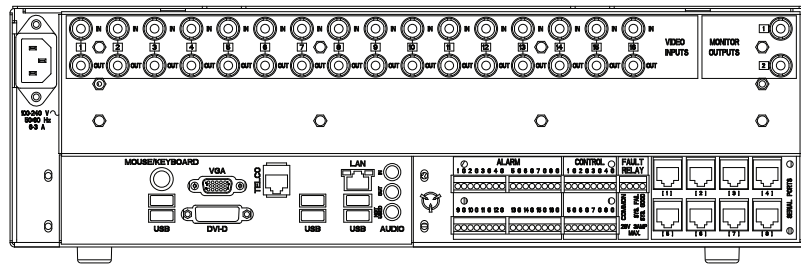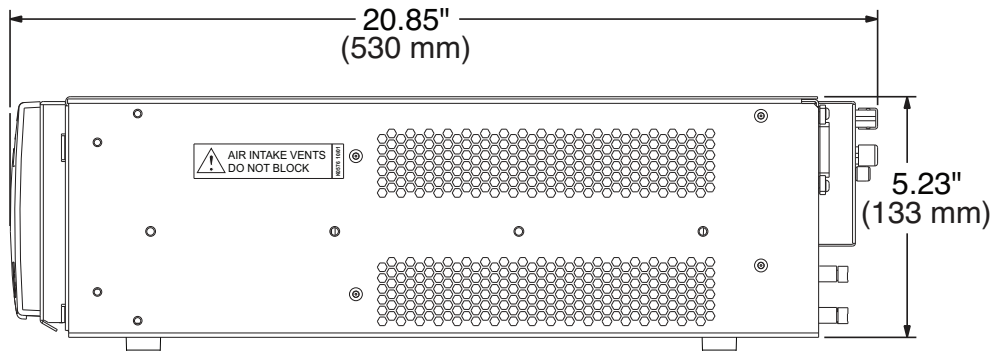| Regulatory	
Emissions	FCC: Part 15, Class B CE: EN 61000-6-3:2007 CE: EN 61000-3-2:2006
Immunity	CE: EN 50130-4:1995 +A1:1998
Safety U.S. and Canada International	ETL Listed to UL 60950-1 / CSA C22.2 No. 60950-1 CB report: IEC 60950-1:2005
PCI Compliance	Certified by Coalfire Systems Inc. 2010
Country of Origin	Product of the USA

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SYSTEM DIMENSIONS

Front View

17.28"
(439 mm)

5.23"
(133 mm)

Honeywell

Rapid Eye™
Hybrid HD

Rear View

VIDEO INPUTS   MONITOR OUTPUTS

MOUSE/KEYBOARD   VGA   TELCO   LAN   ALARM   CONTROL   FAULT RELAY

USB   DVI-D   USB   USB   AUDIO   SERIAL PORTS

Side View

20.85"
(530 mm)

⚠ AIR INTAKE VENTS
DO NOT BLOCK

5.23"
(133 mm)

ACCESSORIES AND ORDERING

Compatible Cameras

Analog	
Analog Cameras (Fixed, Domes, PTZ)	See Honeywell's full line of indoor and outdoor cameras, housings and lenses

Network	
ACUIX™ IP	Honeywell PTZ network camera series
equIP® v2 Series	HD4DIP, HCD554IP, HD4MDIP, HD3MDIP
equIP® 1080P Series	HD3HDIH, HD4HDIH, HCD5HIH
equIP® Wide Dynamic Range Series	HD3MWIH, HD4MWIH, HCD5WIH
Honeywell Performance Series	HD44IP, HD45IP, HD54IP, HD55IP
equIP® H.264 Series	HD3MDIH, HD4MDIH, HCD5MIH

NOTE: For PAL part #s add "X" to the end of the model numbers above.

Other Supported IP Cameras

AXIS IP cameras	P3301 – 5.11.2, P3344 – 5.20.3, and P5522 – 5.25

Recommended Accessories

HVBPIT44-US	RS422 dome protocol interface translator, Bossware
HVBPIT4POS	Four to one serial protocol interface translator, POS or alarm panel data
HASMPIT	SmartPIT™, POS/ECR or ATM text inserter and PTZ protocol translator, compatible with NTSC or PAL video formats
HCSP1	Surge protector, video/24 VAC
HDSP1	Surge protector, data/video/24 VAC
HDCD8TP	Code distribution unit 8 port twisted pair RS232 to RS485
HRPSARE2EARS	Rackmount ears
HRMSLIDE	Rackmount slide kit
AAC232/485	Code converter RS232 to RS485

Software Part Numbers

HRM10ADMIN (included)	ADMIN & VIEW software CD & user manuals
HRM10VIEW	VIEW software CD & user manuals
HRM10CLIP	Clip player for Windows
HRM10UPADMIN	Upgrade ADMIN & VIEW Software CD and User Manuals

Expansion Hard Drives and Spare Hard Drives

Hard drive only (blank) in frame for 16 ch Rapid Eye Hybrid HD v9/v10 units (with or without analytics).

HREHD500G	Hard drive expansion Rapid Eye Hybrid HD v10, SATA, 500 GB, in frame
HREHD1T0	Hard drive expansion Rapid Eye Hybrid HD v10, SATA, 1 TB, in frame

Hard drive only (blank) without frame for 16 ch Rapid Eye Hybrid HD v9/v10 units (with or without analytics).

HREHD500G-N	Hard drive only, 3.5" Rapid Eye Hybrid HD v10, SATA, 500 GB, no frame
HREHD1T0-N	Hard drive only, 3.5" Rapid Eye Hybrid HD v10, SATA, 1 TB, no frame

Hard drive (system pre-installed) in frame for Rapid Eye Hybrid HD v9/v10 units, without analytics ONLY!

HREHD500GP10	Hard drive v10 program Rapid Eye Hybrid HD v10, without analytics, SATA, 500 GB, in frame
HREHD1T0P10	Hard drive v10 program Rapid Eye Hybrid HD v10, without analytics, SATA, 1 TB, in frame

Hard drive (system pre-installed) in frame for Rapid Eye Hybrid HD v9/v10 units, with analytics ONLY! Not usable/interchangeable with Rapid Eye Hybrid HD units without analytics.

HREHD500GA10	Hard drive program for Rapid Eye Hybrid HD v10, with analytics, 500 GB, in frame

NOTE: Not usable/interchangeable with Rapid Eye v8 or older legacy units.

NOTE: Honeywell reserves the right, without notification, to make changes in product design or specifications.

Ordering

HRE   16   R   48   D   1T0

Model — Honeywell Rapid Eye™

# of Channels — 16

Feature
- R   Recorder
- A   Analytics Recorder
  Note: only 480/400 IPS available on Analytics units

Storage Size
- 500   500 GB
- 1T0   1 TB

Media Options
- D   DVD-RW
- N   No DVD-RW

Record Rate @ Resolution
- 48   NTSC 480 IPS @ CIF
- 40   PAL 400 IPS @ CIF
- 12   NTSC 120 IPS @ CIF
- 10   PAL 100 IPS @ CIF

NOTE: The resolutions listed above refer to recording rates for analog camera systems only.

Honeywell