

RUGGED HD

by: Rugged CCTV



16 Channel HD DVR

OPERATION

- Embedded Stand-alone High Resolution DVR**
- Amazing Hexaplex Operation (can perform 6 functions simultaneously) -**
 1. Live Display
 2. Audio & Video Recording
 3. Playback of Archived Footage
 4. Search Archived Footage
 5. Network Monitoring
 6. Remote Setup of Schedules and Settings

Live Screen

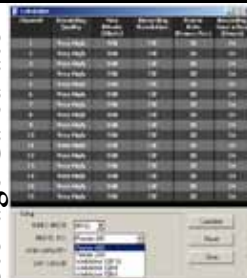


RECORDING

- 16 Channels of Real-Time (up to 480 fps at FULL resolution) H.264 Video Recording**
- 16 Channels of Real-Time Audio Detection & Recording**
- Highest Resolution Recording (up to 704 x 480) for All Channels**
- Court Admissible Watermark on each Video Frame**
- Multiple Language Support – switch between 17 different languages**

RAID CAPABLE

Storage Calculator



MONITORING

- 3 Main Monitor Options, HDMI, VGA or CCTV & Spot Monitors**
- Remote Monitoring – with Web Browser, our (CMS) Remote Software or your PDA**
- Control & Program multiple PTZ's through the DVR & Remote Software**
- Auto E-Mail upon event to multiple Email Addresses**
- Works with most Network Types and IP Configurations**

Covert Channels

Using PDA/BlackBerry and iPhone



PROTECTION

- Multi-level Password Permissions and 15 Users**

REAL TIME
video & audio DVRs!!

PLAYBACK

- More Ways to Search than ever before:**
 1. **Smart Search** – choose any part of a picture and ask the system to find all recordings with motion occurring in that part of the frame.
 2. **Search by Date & Time or any Event**
 3. **Multi-Time Camera Searches**
 4. **Multi-Day Camera Searches**
- Lightning Fast Playback** – up to 300x speed or all the way down to frame by frame mode Along with Panorama Playback and Smart Search

Playback Screen



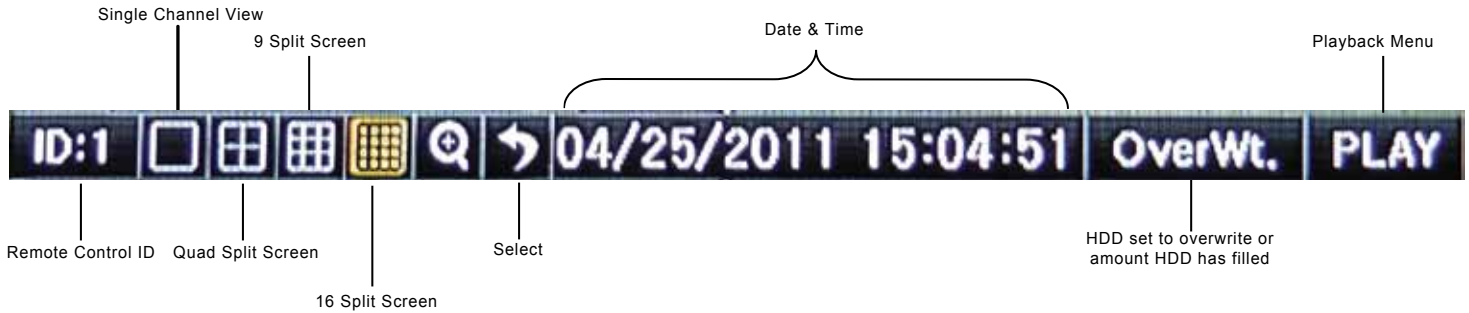
ARCHIVED FOOTAGE

- Manages up to 6 Internal Hard Drives**
- Automatic Archive back-up to Network Attached Storage (NAS) and Manual over Internet**
- Multiple ways to Transfer archived footage:**
 1. **Over the Network through the CMS software**
 2. **USB 2.0 Removable Media with Self Executable Player (Quick Viewer)**
 3. **Built In CD/DVD Burner with Self Executable Player (Quick Viewer)**

Additional Features

- Zoom (Live and Playback)
- Direct Print of Still Images
- POS/ATM Interface

On - Screen System Status Bar



Specifications

Video Input/Output	Camera Input - 16 BNC
	Monitor Output - 1 BNC, 1 VGA, and 1 HDMI @ 1920 X 1080
	Loop Output - 16 BNC
	Spot Output - 4 BNC - Single or Quad
Audio Input / Output	Line Input - 16 RCA
	Line Output - 1 RCA
Recording Resolution	352 x 240, 704 x 240, 704 x 480 (NTSC), 352 x 288, 704 x 576 (PAL)
Recording Frame Rate	Rugged HD - Max 480fps - NTSC, Max 400fps - PAL
	- Can Record 30 fps per channel at the highest 704 X 480 resolution
Compression	Video - Standard H.264, Audio - G.732
Display Mode	Live - 1 / 4 / 9 / 16 / Sequence, Playback - 1 / 4 / 9 / 16
Control Input / Output	Sensor Input - 16 or 8 and 8 POS interface terminals, Relay Output - 4
System Control	Front Panel, Remote Control, Mouse (not included), Network
HDD Bay	6HDD, (Max 2.0TB per drive) - RAID1 : 2/4/6 and RAID5 : 3/4/5/6
Backup / Copy Interface	Ethernet, IEEE1394, USB 2.0, DVD/CD RW
Network Interface	PSTN / ISDN / LAN (Ethernet) / Cable Modem / ADSL / Dynamic - IP / Private - IP / DDNS / Multi - Network Interface (Ethernet & PSTN)
PTZ	RS485
Software Upgrade	RS232C (Serial), Ethernet, USB Memory Stick
Specific Features	Audio Detection / Auto E-mailing to 5 users / Dual Monitor / Direct Print /NTP Time Protocol / (Simultaneous Live / Playback Display) / Covert Channels / Zoom / DVR Settings Sync Control
Remote Access	Remote Access Software Included / Web Monitoring / Smart Phone Access
Power	90~250V, 50/60Hz, 80 Watts
Operating Temperature	5°C - 40°C
Weight/Dimensions	32lb with HDDs / 17"(w) x 3.5"(h) x 11.25" (d)

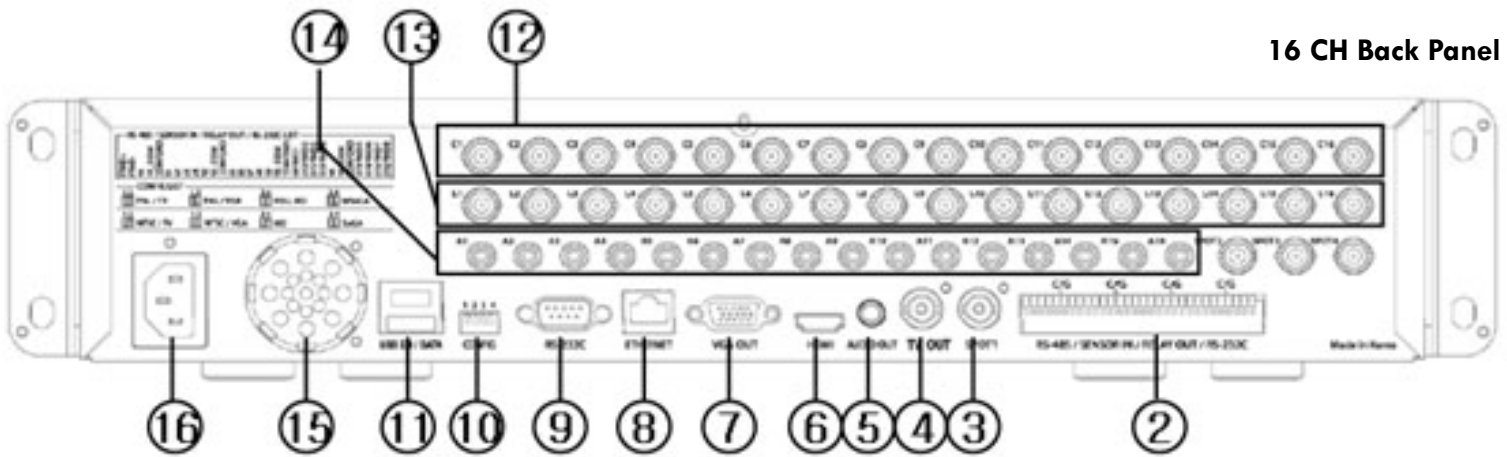


Front Panel



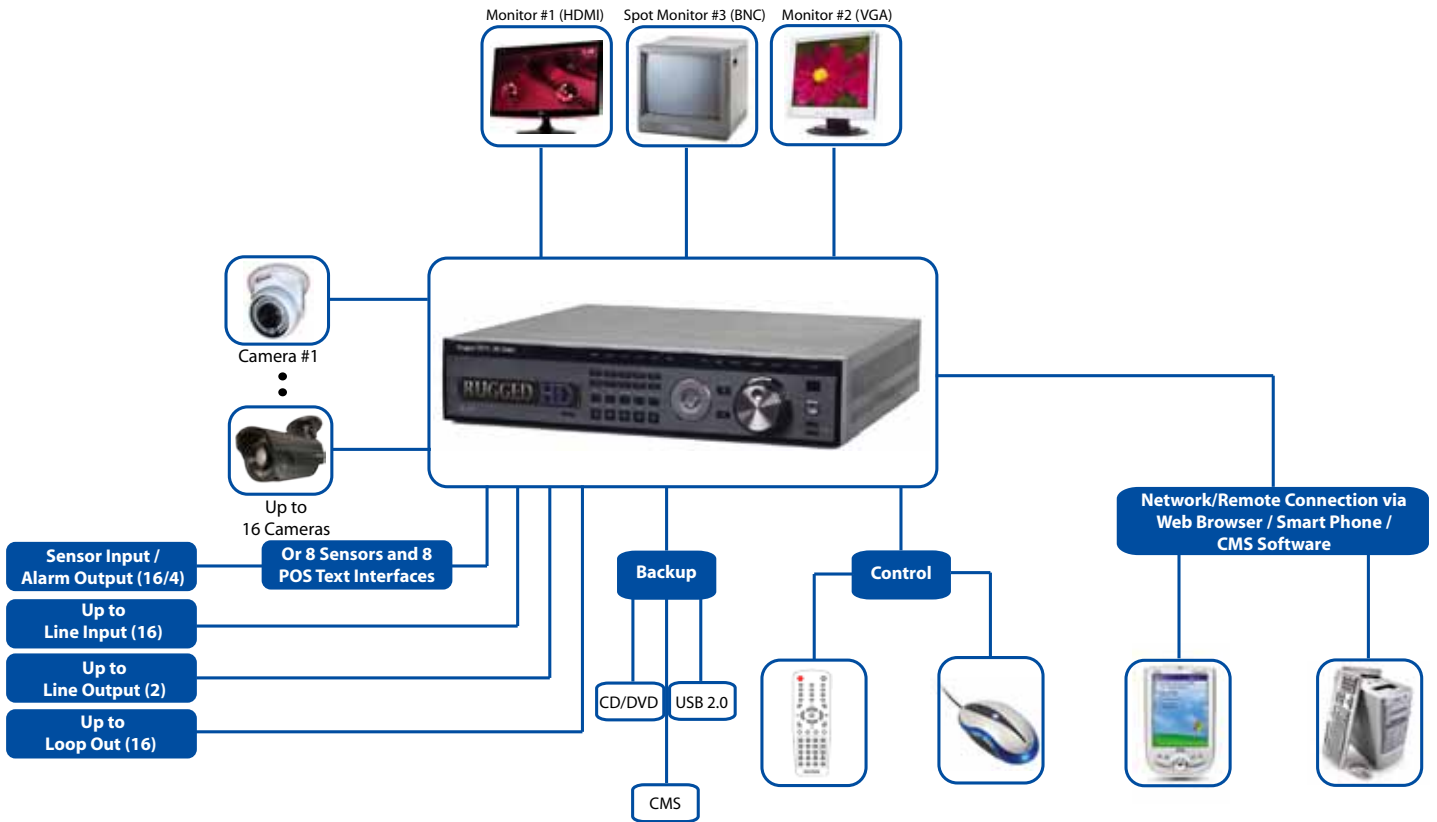
Front Panel Legend

No.	Name	Function
1	LABEL	Brand Name and Model Name
2	LED DISPLAY	HDD and System Power and Status Indication LED
3	Number Button	Channel Selection or Number Input
4	MOVE & DISPLAY & Select	Move from one category to another or change to the display mode or select
5	MENU	Various Modes
6	JOG & SHUTTLE	Speed in Playback Mode / Play Direction / Frame Play
7	POWER	Turn the system power ON or OFF
8	USB Port	Connection port to the USB mouse and USB memory stick
9	ESC	Exit the current menu or move to the upper menu
10	SPOT	Spot Control
	PTZ	PTZ Pan/Tilt/Zoom Control
	CAPTURE	Capture the displaying image into USB
	BACKUP	Save the recorded image at other media.
	SEARCH	Search the recorded Image.
11	Reverse Play / Fast Reverse RELAY	Backward Playback/Rewind (in the Playback Mode) Relay Control (in the Monitoring Mode)
	Reverse Frame by Frame STATUS	Backward Playback Frame by Frame (in the Playback Mode) View System Configuration (in the Monitoring Mode).
	Pause LOCK	Pause (in the Playback Mode) Lock (in the Monitoring Mode)
	Forward Frame by Frame LOG	Playback Frame by Frame (in the Playback Mode) System Log View(in the Monitoring Mode)
	Forward Play / Fast Forward PLAY	Playback/Fast Forward (in the Playback Mode) Play back (in the Monitoring Mode)
12	Eject	CD, DVD Eject Button
13	ODD	CD-RW, DVD-RW



Back Panel Legend

No.	Name	Feature	Format
2	Terminal Block	RS-485 / SENSOR IN / RELAY OUT / RS-232C	Terminal Block
3	SPOT	CCTV monitor connection to output images of the channel generating an event signal	BNC
4	TV OUT	CCTV monitor connection	BNC
5	AUDIO OUT	Audio Output Connection(Line Only Output)	RCA
6	HDMI	HDMI Output	HDMI type C
7	VGA-OUT	VGA Monitor or LCD Monitor Connection	D-Sub 15P
8	Ethernet	ADSL, Cable Modem, Ethernet 10/100 Base-T, Network Connection	RJ45
9	RS-232C	Console Output	D-Sub 9P
10	CONFIG	NTSC/PAL VGA/TV Full HD(1920x1080), HD(1920x1080) WSXGA+(1680x1050), SXGA(1280x1024)	DIP S/W, 4-pin
11	USB2.0/eSata	USB Backup and Additional Storage	USB Type A, e-SATA
12	Camera In	Video Camera Connection	BNC
13	Loop Out	Video Signal loop-back Output Connection	BNC
14	Audio In	Audio Input Connection	RCA
15	Ventilating Opening	Opening for Ventilating the internal components (HDD most important)	Power Supply Fan
16	Power	90 ~ 250V, 50/60Hz, 80 Watts	AC inlet (3p, female)



RUGGED HD Components

