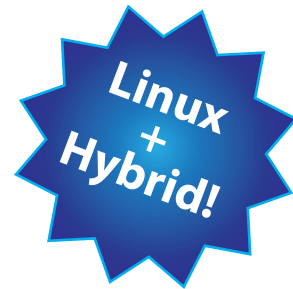


## LIN16-480 Hybrid Video Surveillance DVR



### Key Points:

- Embedded Linux
- 16 Channel, True Hybrid DVR
- Graphical User Interface –
- Adjustable Frame Rates and Resolution on Every Channel (Analog Cameras Only)
- D1 real-time over 8 channels



The Luxon Video LIN16 Series are DVRs with a new perspective on video surveillance. These systems are the latest in technology by merging reliability with efficiency, by integrating an embedded Linux Digital Video Recorder (DVR) with a Graphical User Interface (GUI). The units are built with Linux dependability for optimum DVR performance and consistent delivery of high-quality surveillance video.

They are equipped with a Graphical User Interface (GUI) that minimizes training time while maximizing user effectiveness. The unprecedented visual layouts and intuitive controls offered by the LIN16 Series, ensures that users can simply point-and-click to see who's at the front door, search through alarms for the week or take immediate command of an unraveling event!

Another key feature of the systems is the ability to adjust the frame rates and resolution individually for each of the units' 16 channels. Using the new adjustable settings, vulnerable areas like entry ways, can be set to real-time frame rates with D1 resolution while non-vital areas are set to CIF resolution and lower frame rates. Now the user, not the system, has control over bandwidth, storage and image clarity!

# CAPABILITIES

## MONITORING

For environments that depend on live video, the LIN16 offers many features for fast and responsive event management:

- Video (**Max of 16 feeds in any combination**)
  - Analog: 16 BNC Connectors with H.264 compression
  - IP: Up to 10 Channels @ 1.3 MegaPixel or 6 Channels @ 2.3 MegaPixel with H.264, MPEG4 and MJPEG streams
    - 2.3 MegaPixel (1920x1200) support for CHs 1-15
    - 5 MegaPixel (2592x1944) support for CH 16
- Audio - 16 channel in and 1 channel out, 1 microphone input
- 16 sensors & 4 relays and up to 128 more with add'l E-I/O box
- E-maps (8) showcasing camera, sensor and relay positions
- Monitor video (live and playback) at local DVR site or remotely

### Live Display

- Award winning Graphical User Interface (GUI)
- Channel Auto scan with 1, 4, 8, 9, 13 & 16 screen splits
- Digital zoom incorporated for greater detail in live video

### Alarm/Notifications

The LIN16 is ready for real-time incident response by:

- Starting video recording on multiple cameras
- Sending footage to spot monitor
- Enabling camera PTZ tracking and enlarging triggered video
- Following sensor with relay protocols (e.g. locking gates etc.)
- Launching the triggered channel's corresponding Emap
- Sending email notifications
- Playing warning audio alarm
- Sending video to Central Management System

## RECORDING

Based on environmental needs, recording can be setup to maximize video quality and minimize storage needs:

- Recording modes - Continuous, Alarm (Motion, Smart\* or Audio) recording
- Alarm based recording can be schedule dependent
- Two types of de-interlace methods (for analog cameras):
  - optimized for static or dynamic scenes for smoother images
  - \*Smart - activity based escalation of recording fps (low - high)

## VIDEO ENHANCEMENTS

The LIN16 includes editing software to amplify video quality:

- iEnhance - color, noise and light manipulation
- iStable - smooths shaking and jolts

## USER ACCESS

- Up to 32 user accounts with individually assigned passwords and user privileges (operation, control and remote access)

## FORENSICS

### Search

- Defined parameter search by date, time, camera, event, and event log file
- Luxon Video's Visual Search that visually breaks down video by day, hour, minute, 10 seconds and second
- Time search to scroll through footage by moments
- Easy retrieval and playback of footage by "Bookmarking" significant segments
- Advanced event log search by event, operation, system and network activities

### Playback

- Built-in channel playback controls for date and time

### Backup/Storage

- Easily export/backup to DVR-RW, USB flash drive and external HDD
- Supports 3 (4th optional) SATA HDDs and 1eSATA HDD concurrently

## REMOTE

### Viewing

From laptops, cells phones, PDAs and more, you can track video whenever and wherever

- iViewer (for Apple iPhones), WebViewer, PDAViewer, JavaViewer and Remote Console
- Supports Gigabit LAN for network connection speed

### Multiple Systems

- With NVR-CMS central management software, you have total command of up to 1000 remote systems from one location

### Multicasting

- iDispatch - For high-traffic video broadcasting, the LIN16 will multicast video streams to drastically lower network, server and camera loads for effective remote viewing

## CONFIGURATION

- Individually adjust the resolution and frame rates for all analog channels
- Pre-schedule many system functions including recording, backup, reboot, alarm and relay controls as a one-time or recurring weekly task

## SPECIFICATIONS

### LIN16 Detailed Specifications

Front Panel Connections				
Front panel controls	Power switch, Keypad, PTZ Controls			
DVD writer	Included, supported medias: DVD±R, DVD±RW			
USB 2.0	3			
Rear Panel Connections				
Video Inputs (analog)	16 - Looping, BNC connectors			
Video Inputs (IP)	16 video H.264/MPEG4/JPEG data streams			
Video Output	1 - VGA out, 2 - Spot Monitor Out			
Audio Input/Output	16/1			
Microphone Input	1			
Alarm Inputs/Relay Outputs	16/4			
E-SATA	1			
USB 2.0	0			
Communication	1x - RS232, 1x - RS485			
AC Power	Power Adapter, 19V DC			
Unit				
Operating system	Embedded Linux			
Compression (analog)	H.264			
Video Format	Analog	NTSC: 352 x 240 (CIF), 720 x 240 (Half-D1), 720 x 480 (D1)		
	IP	Up to 1920X1200/CH, 16 <sup>th</sup> CH up to 5 megapixel		
Recording Rates	Analog	Individually Adjustable (0 - 30fps for analog inputs)	CIF	480fps
			Half-D1	480fps
			D1	240fps
IP	Per camera specifications			
Storage	Capacity	Supports up to 3 Internal SATA HDD (4th Optional)		
	eSATA	1 eSATA connector, Support eSATA RAID		
Communication Ports	RS 485	1, Terminal block, Tx+, Tx-, Rx+, Rx-		
	RS 232	1, 9 Pin, Male		
Networking	1x - 10/100/1000 Base-T Ethernet, RJ-45			
Supported IP cameras (support IP PTZ, IP IO, & IP audio if IP cameras built-in)	AXIS, LUXON VIDEO, Panasonic, SONY, Arecont, BOSCH, IQinvision, JVC, TOSHIBA, VIVOTEK, ACTi, D-Link, PiXORD, PELCO, Apron, Lilin and more			
Operator Interface	USB mouse, USB PC keyboard, Remote controller (supports optional IR extension cable)			
Browser/Remote Client	MS Internet Explorer 6+, Windows 2000, XP, VISTA			
Mechanical				
Dimensions (H x W x D)	2.6 x 16.9 x 14.5in			
Weight	10 lbs (not including optional HDD)			
Rack Mountable	Optional rack ears			

Software		
Interface	Graphical User Interface	
Account Administration	Up to 32 accounts with configurable user privileges	
Camera Administration	Individually adjust fps/resolution per analog camera	
PTZ Control	Zoom-in/Zoom-out, Focus-in/Focus-out, Direction, Speed, Preset point, Autopan	
De-interlace options	Optimize for dynamic or static analog scenes	
Playback Administration	Playback while recording or setup	
	Play, rewind, fast-forward, frame-by-frame control	
	Digitally zoom to specific regions on recorded video Export single frame to .jpg, export video clip to .DVR	
Motion Detection	Configurable to sense mass/motion; can partition off areas in monitoring regions from motion triggers	
Event Recording	Schedule: Continuous, Smart, Motion, Alarm, Manual	
Video Event Search	Visual Search, date/time, camera, event & log files	
Advanced Event Log	Full event, operation, system & network activities log	
Alarm Notifications	Launch or send E-map, relay, video capture, NVR-CMS or E-mail notification	
E-map Display	Positions of cameras, sensors, relays & event status	
iEnhance	Enhance video quality such as Brightness/Contrast/Hue/ Saturation/ Sharpness/ Noise Reduction/De-interlace/ Gray Scale of recorded video	
iStable	One-click fix for shaky video caused by camera movement (such as wind or vandalism)	
Remote Management		
Central Management	NVR-CMS software - supports up to 1000 DVRs	
Remote DVR connectivity	WebViewer (MS Internet Explorer only), Remote Console, JavaViewer, PDAViewer	
Dispatch Server	Balance NVR communication for added client access and greater data transfer speeds	
DDNS	Allow remote clients to search dynamic servers without enquiring for server's IP address	
Environmental		
Temperature	Operating	32 ° to 104 °F
	Storage	-22°F to 140 °F
Relative humidity	Operating	50%-80%
	Stored	90%
Regulatory		
Emissions	FCC: Part 15, Class A	
Warranty		
2 Year Limited Parts and Labor		

# RECOMMENDATIONS

## LIN16 Series Hardware Recommendation List

**Note:** We highly recommend against using Samsung Hard Disk Drives for NVR products.

### SATA HDD

Brand	Model	Capacity
Hitachi	HDT725050VLA360	500GB
Seagate SV35.3	ST31000340SV	1TB
Seagate SV35.2	ST3500630SV	500GB

### PTZ Camera (visit our website support/download page for a complete list)

Brand	Product Number
AmericanDynamics	UltraS - all products
Canon	VC-C4R
CD55	all products
DiGiDome	DRX -502A (DOH-240)
DMP23-H2	DMP23-H2
DynaColor	All products
Eastel	all products
ELMO	PTC -200C
Fastrax II	HID-2404
JVC	TK-C676 / TK-C675
Lilin	PIH 717X / 7000 / 7600 / PIH 7622/ 7622DH / 7635DH
MD101	all products
MicroJack-P	all products
NiceCam	all products
Panasonic	WV-CS850 / WV-CW860 / WV-CS950 / CS850B / CW860A / WV-CZ352
Pelco	Pelco-D/ Pelco-P
Philips	TC8560, TC700
SamSung	SCC-641
Sony	15-CZ45-1 /EVI-D70P
Yoko	all products

### Raid System

Brand	Product Number
Stardom	SR3610-2S-SB2

### PDA Basic requirement

Notice: This feature is only available on version 5.1 or above AP. For customers who are using 5.0 version of AP, please visit the Support/Download page to download and upgrade to the latest version of AP

1. CPU: Arm architecture, for example, Intel Xscale.
2. OS: MS Window Pocket PC 2002/2003 or Mobile 5 and above.
3. GPRS or WLAN module is recommended.

### Symbian Smartphone Basic Requirement

Notice: This feature is only available on version 7.1 or above AP. For customers who are using v5.7, v5.5, v5.1 or v5.0 version of AP please visit the Support/Download page to download and upgrade to the latest version of AP

1. OS:Symbian Smartphone
2. The OS needs to support JAVA MIDP 2.0(JAVA2 ME)
3. Network module such as WAP, GPRS, WLAN, etc is required.

\*Hardware recommendations are the minimum required hardware specifications for running our systems and not a guarantee to achieve the best performance of our DVR systems. Hardware specifications required to achieve the best performance of our DVR systems are subjected to different system settings and operation conditions.

### Model Numbers

Part #'s	Description
LIN16-480	HYBRID 16CH, 480FPS, NO Hard Drive, DVDRW
LIN161TB480	HYBRID 16CH, 480FPS, 1TB, DVDRW
LIN162TB480	HYBRID 16CH, 480FPS, 2TB, DVDRW
LIN164TB480	HYBRID 16CH, 480FPS, 4TB, DVDRW
LIN166TB480	HYBRID 16CH, 480FPS, 6TB, DVDRW