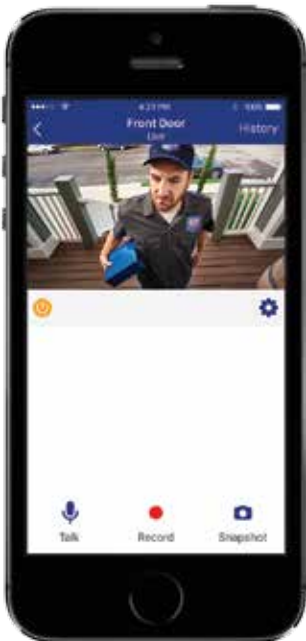# LOREX®

4MP SUPER HIGH DEFINITION SECURITY DIGITAL VIDEO RECORDER

PWR   HDD

MPX SuperHD

VIEW YOUR WORLD IN 4MP SUPER HD

Record outstanding 4MP Super HD video for double the detail of 1080p. Stay connected to what matters most from anywhere in the world with FLIR Secure® or Lorex Secure® apps for smartphones and tablets.

FLIR SECURE™   LOREX® SECURE

Download on the **App Store**

GET IT ON **Google play**

4/8/16 Channels 1-6TB HDD 4MP Super HD Resolution

4MP SUPER HIGH DEFINITION
SECURITY DIGITAL VIDEO RECORDER

FEATURES:

- True 4MP SuperHD recording on all cameras [1]

- 24/7 security-grade pre-installed hard drive

- Continuous, scheduled, and motion recording

- H.264 video compression reduces data bandwidth requirements for efficient data storage, reduced network load for easy remote connectivity

- HDMI output (HDMI cable included) for simple connection to HD TVs [2]

- Accurate time stamps with NTP & daylight savings time

- Click and drag digital zoom in live view and playback

- 2 video outputs (HDMI & VGA) to connect multiple monitors

- Instant USB backup of live video from selected camera

- Automatic firmware upgrade over the Internet ensures your system is secure and up to date [3]

- FLIR Secure™ or Lorex Secure™ app with 3-Step setup [4] connects all your cameras and systems from any iOS or Android smartphone and tablet

- Motion push notifications and email alerts

- Dual streaming to conserve bandwidth

- Backward compatible with standard analog cameras

USE ONE APP TO WATCH IT ALL

Get set up in an instant and stay connected with the FLIR Secure™ or Lorex Secure™ app. Enjoy remote live viewing, review videos, and get important motion and sound alerts on-the-go. The app connects all your cameras and systems from any iOS or Android smartphone or tablet.

LHA4100/LHA4200 Series DVRs   **www.lorextechnology.com**

SYSTEM

Operating System	Linux (embedded)
Pentaplex	Simultaneous View, Record, Playback, Backup & Remote Monitoring
Number of Channels	**4/8/16 ch**

INPUTS/OUTPUTS

Video IN	4/8/16 x 1Vp-p, CVBS, 75ohms, BNC
Video OUT	No
VGA OUT	Yes
HDMI	Yes
Audio IN	4 lines IN (RCA)
Audio OUT	1 line OUT (RCA)
USB Port	1 at the back, 1 at the front
Alarm IN	None
Alarm OUT	None
Video Output Resolution	**8/16 ch:** HDMI: 3840×2160; 2560×1440; 1920×1200; 1600×1200; 1680×1050; 1920×1080; 1440×900; 1280×1024; 1280×720; 1024×768 **4 ch:** Supports up to 4MP through the HDMI port. For all models, VGA output is limited to 1080p (2MP).
PTZ control	RS-485 Pelco D & P Protocol

DISPLAY

Live Display	**4 ch:** 1, 4 **8 ch:** 1, 4, 8, 9 **16 ch:** 1, 4, 8, 9, 16
Live Display Speed	**4 ch:** 120 NTSC, 100 PAL **8 ch:** 240 NTSC, 200 PAL **16 ch:** 480 NTSC, 400 PAL
OSD	ON/OFF
System Navigation	USB Mouse, IR Remote Controller, Front Panel
Motion Area Setting	Fixed Grid NTSC (44×30) / PAL (44×36)
Sensitivity levels	8
Firmware Upgrade	Automatic over the Internet & via USB device and Network
User Authority	By user group
Time Synchronization	Auto time sync by NTP server

RECORDING

Video Compression	H.264
Audio Compression	G.711
Recording Resolution	NTSC: 4MP / 3MP / 1080p / 720p / 960H
Recording Frame Rate	4MP: 15fps (per ch) 3MP: 20fps (per ch) 1080p/720p/960H: 30fps (NTSC) / 25fps (PAL)
Recording Resolution Setting	Per camera for different resolutions
Recording Quality Control	6 levels
Recording Schedule	By hour, by day, by recording mode, by motion, by channel
Pre Recording	Max. 2 Secs
Post Recording	Max. 5 Minutes
Reliability	Watch-Dog, Auto-recovery after power failure
Covert Video	Yes

PLAYBACK

Playback Channel	**4 ch:** 1 / 4 **8 ch:** 1 / 4 / 8 **16 ch:** 1 / 4 / 9 / 16
Playback Speed	Variable Max 16x
Playback Players	Backup Player
Search	By Time/Date & Motion Event
Log Search	Up to 4000 lines for system, configuration changes, motion/alarm detected, account, record & storage
Audio Play	Yes

STORAGE & ARCHIVE

Storage	4ch / 8ch: Up to 1 HDD (SATA) 16ch: Up to 2 HDD (SATA)
Maximum Capacity	4ch / 8ch: Up to 1 × 6TB 16ch: Up to 2 × 6TB (12TB Total)
Backup Media	USB Flash Drive & HDD
Backup File Format	H.264 / MP4 / AVI file

CONNECTIVITY

Cloud Connection	FLIR Secure® or Lorex Secure® app with FLIR Cloud™ Connectivity
Supported Operating Systems	**Windows**™ **Mac** OSX
Remote Software	Client Software (PC) & Safari (Mac)
Email notification	Text with snapshot
Instant Smart Phone & Tablet Support †	iPad®, iPhone®, Android™
DDNS	None
System Configuration	Full setup configuration over network
Ports	Programmable by User
Network Protocol	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP
Network Interface	10/100/1000-Base-TX, RJ-45
Network Bit Rate	Max 64Mbps

GENERAL

Power Consumption	Approx. 7.08 watts (no HDD included)
Supply Voltage	100VAC-240VAC, 12VDC, 2A, 50/60Hz
Unit Dimensions	4/8 ch: 12.” × 8.3” × 2.0” 310mm × 210mm × 50mm 16 ch: 14.8” × 12.4” × 2.0” 375mm × 315mm × 50mm
Unit Weight (KGs)	4/8 ch: 2.6lb / 1.2kg (without hard drive) 16 ch: 4.4lb / 2kg (without hard drive)
Operating temperature	14°F ~ 130°F / -10°C ~ 55°C
Humidity	10 ~ 90% RH

RECORDING RESOLUTION (PIXELS) & SPEED (FPS - FRAMES PER SECOND)

		4MP SuperHD	2MP (1080p) & 1MP (720p)
4ch	Total	60/48	120/100
	Per channel	15/12	30/25
8ch	Total	120/96	240/200
	Per channel	15/12	30/25
16ch	Total	240/192	480/400
	Per channel	15/12	30/25

DVR Inputs & Outputs

8 Channel DVR (LHA4108 Series)

16 Channel DVR (LHA4216 Series)

Dimensions:

4/8 Channel DVR

210mm/8.3"
50mm/2.0"
310mm/12.2"

16 Channel DVR

315mm/12.4"
50mm/20"
375mm/14.8"

Product Information:

MODEL	CONFIGURATION	PACKAGE	W x D x H Inches & mm	WEIGHT	CUBE	UPC Code
LHA41041T	4CH 4MP SUPER HD DVR WITH 1TB HDD	Brown Box	16.5 × 10.6 × 3.9" 420 × 270 × 100mm	4.06 lb / 1.84 kg	0.6cft / 0.01cbm	6-95529-01129-5
LHA41081T	8CH 4MP Super HD DVR with 1TB HDD	Brown Box	16.5 × 10.6 × 3.9" 420 × 270 × 100mm	4.06 lb / 1.84 kg	0.6cft / 0.01cbm	6-95529-01143-1
LHA41082T	8CH 4MP Super HD DVR with 2TB HDD	Brown Box	16.5 × 10.6 × 3.9" 420 × 270 × 100mm	4.06 lb / 1.84 kg	0.6cft / 0.01cbm	6-95529-01130-1
LHA42162T	16CH 4MP Super HD DVR with 2TB HDD	Brown Box	18.5 × 14.4 × 3.9" 470 × 365 × 100mm	4.06 lb / 1.84 kg	0.6cft / 0.01cbm	6-95529-01131-8
LHA42163T	16CH 4MP Super HD DVR with 3TB HDD	Brown Box	18.5 × 14.4 × 3.9" 470 × 365 × 100mm	4.06 lb / 1.84 kg	0.6cft / 0.01cbm	6-95529-01230-8
LHA41082TP	8CH 4MP Super HD DVR with 2TB HDD	Brown Box	16.5 × 10.6 × 3.9" 420 × 270 × 100mm	4.06 lb / 1.84 kg	0.6cft / 0.01cbm	6-95529-01233-9
LHA42162TP	16CH 4MP Super HD DVR with 2TB HDD	Brown Box	18.5 × 14.4 × 3.9" 470 × 365 × 100mm	4.06 lb / 1.84 kg	0.6cft / 0.01cbm	6-95529-01234-6
INCLUDES	1 × Super HD DVR with pre-installed HDD, 1 × HDMI cable, 1 × Ethernet cable, 1 × DVR power adapter, 1 × Remote control, 1 × Mouse, 1 × Quick setup guide					

Disclaimers:

1. Compatible with select 4MP cameras, 1080p & 720p MPX cameras and standard analog cameras. For a list of compatible cameras please visit www.lorextechnology.com/compatibility
2. Recording time may vary based on recording resolution & quality, lighting conditions and movement in the scene.
3. HDMI output up to 4K (8/16ch). 4ch supports up to 4MP output. and 1080p HD (4ch) for high definition multi-channel live viewing only. Up to 4MP recording resolution is limited to a maximum of 4MP per channel. Image quality and resolution is dependent on the type of camera connected to the DVR. VGA output is limited to 1080p resolution.
4. Requires a high speed internet connection and a router (not included). A minimum upload speed of 3Mbps is required for the best video performance. Up to 2 devices may connect to the system at the same time.