WIRELESS SECURITY CAMERA SYSTEM

WIRELESS CONVENIENCE WITHOUT COMPROMISE

Get the full benefit of recording to a high-capacity DVR with the flexibility of wireless cameras. No need to run video cables - experience true peace of mind with reliable wireless video you can view anywhere on your smartphone, tablet, PC, or Mac.

4/8/16 Channels  2/4 Cameras  135/90FT  500GB-1TB HDD
135/90FT  41/27M Night Vision

LH030 Wireless Series DVRs
DVR FEATURES:

- Tablet / smartphone viewing and playback
- Lorex Stratus Connectivity - 3 step setup
- Superior 960H Resolution - 34% more detailed and true-to-life images
- HDMI cable included for simple connection to HDTVs
- 24/7 security-grade hard drive
- Instant email alerts with snap shot attachment
- Continuous, scheduled and motion recording
- Advanced mobile apps with live viewing, playback, video recording, and snap shot
- PC and Mac compatible
- H.264 video compression
- 3 video outputs (HDMI, VGA and BNC) to connect multiple monitors
- Pentaplex operation - view, record, playback, back up & remotely control the system simultaneously
- PTZ cameras supported (RS485) remotely control through App
- Accurate time stamps with NTP & Daylight Savings Time
- Automatic firmware upgrade over the Internet ensures your system is secure and up to date
WIRELESS FEATURES:

- Real-Time (up to 30fps) wireless video with MPEG-4 compression @ 640x480 (VGA) resolution
- Extended bandwidth delivers smooth high frame rate video
- SignalGuard Technology continuously monitors the wireless signal and automatically reconnects upon detecting low signal strength
- Next generation adaptive Frequency Hopping Spread Spectrum (FHSS) technology greatly reduces signal interference
- Auto-mechanical infrared camera filter achieves accurate color reproduction in varying lighting conditions
- 2 channel receiver for separate wireless video channels to your DVR minimizes cable clutter
- Long Range night vision range up to 135ft (41m) / 90ft (27m)
- Simple installation. No video cable required
- Weatherproof camera and power connectors for outdoor or indoor installation
- Easily connects to any surveillance DVR (BNC)
- High gain antennas provide up to 165ft (50m) indoor / 500ft (152m) outdoor wireless range
- Vandal resistant camera design with cable pass-through mounting brackets
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 1Vpp, CVBS, 75ohms, BNC
- Video OUT: 1 x BNC
- VGA OUT: Yes
- HDMI: Yes
- Audio IN: 4&8 ch: 2 Line in (RCA), G.711, 16 ch: 4 Line in (RCA), G.711
- Audio OUT: 1 line OUT (RCA), G.711
- USB Port: 1 at the back, 1 at the front
- Alarm IN: 4ch / 8ch: Without Alarm, 16ch: 8ch In
- Alarm OUT: 16ch: 1ch Out
- Video Output Resolution: 800x600, 1024x768, 1280x1024, 1440x900, HDMI(1920x1080)
- PTZ control: RS-485 Pelco D & P Protocol

Display:
- Live Display: 4ch: 1, 4, 8 ch: 1, 4, 8, 16 ch: 1, 4, 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
- Motion Area Setting: Adjustable grid (30x44) NTSC, Adjustable grid (36x44) PAL
- 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 Setting: Per camera for different resolutions
- Recording Quality Control: 3 levels
- Recording Schedule: 4ch & 8ch: By hour, by day, by recording mode, by motion, by ch, 16ch: By hour, by day, by recording mode, by motion, by alarm, by ch
- Pre Recording: Max. 10 Secs
- Post Recording: Max. 5 Minutes
- Reliability: Watch-Dog, Auto-recovery after power failure
- Covert Video: Yes

Playback:
- Playback Channel: 4 ch: 1~4 Adjustable, 8 ch: 1~8 Adjustable, 16 ch: 1~16 Adjustable
- Playback Speed: Variable Max 16x
- Playback Players: Backup Player
- Search: By time & event
- Log Search: Up to 100,000 lines for system, configuration changes, motion/alarm detected, account, record and storage
- Audio Play: Yes

Storage & Archive:
- Storage: Up to 1 HDD’s (SATA)
- Maximum Capacity: up to 4TB
- Backup Media: USB Flash Drive & HDD
- Backup File Format: H.264 file (AVI generator included)

Connectivity:
- Cloud Connection: Lorex Status Connectivity
- Supported Operating Systems: Windows™, Mac OS
- Remote Software: Client Software (PC) & Safari (Mac)
- Email notification: Text with snapshot
- Instant Smart Phone & Tablet Support: iPad®, iPhone®, Android™
- DDNS: Free Lorex DDNS
- System Configuration: Full setup configuration over network
- Ports: Programmable by User
- Network Protocol: TCP/IP / DHCP / UDP / DDNS / PPPoE
- Network Interface: 10/100-Base-TX, RJ45
- Network Speed Control: 48Kb ~ 8MB/sec.

General:
- Power Consumption: Approx. 10 watts (no HDD included)
- Supply Voltage: 100VAC-240VAC, 12VDC, 2A, 50/60Hz
- Unit Dimensions: 11.8”/300mm x 8.6”/220mm x 1.9”/50mm (W x D x H)
- Unit Weight: 1 kg/2.2 lbs
- Operating temperature: 32° ~ 104° F / 0° ~ 40° C
- Humidity: 10 ~ 90% NC

Recording Resolution (Pixels) & Speed (FPS - Frames Per Second):

<table>
<thead>
<tr>
<th>FPS</th>
<th>960H Mode</th>
<th>D1 Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/2 960H</td>
<td>1/4 960H</td>
</tr>
<tr>
<td>960 x 480</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>960 x 240</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>480 x 240</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>Per channel</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

LH030 Wireless Series DVRs www.lorextechnology.com
## Specifications

### GENERAL
- **TX Frequency Range**: 2.400GHz~2.480GHz
- **TX Power**: 16dBm
- **Unobstructed Effective Range**: 165ft (50m) indoor, 500ft (152m) outdoor
- **Data Rate**: 4 Mb/s
- **Modulation**: GFSK
- **Spread Spectrum**: FHSS
- **Operating Temperature Range**: 14°F ~ 122°F / -10°C ~ 40°C

### Camera
- **Image Sensor Type**: 1/4" Color CMOS Image Sensor
- **Effective Pixels**: H: 640; V: 480
- **Image Compression**: MPEG4
- **Image Resolution**: VGA (640x480)
- **Lens**: 3.6mm F2.0
- **Field of View (Diagonal)**: 69°
- **AGC**: On
- **Power Requirement**: 9V DC +/- 5%
- **Power Consumption**: 430mA Max with IR LED, 220mA Max without IR LED
- **Environment Rating**: IP66
- **IR LED Quantity / Type**: 24 pieces / 850nm
- **Night Vision Range**: 90ft (27m) / 135ft (41m)
- **Built in Auto IR Turn On / Off**: CdS Drive Auto IR LED turn On/Off Circuit
- **Dimensions (W x D x H)**: 79 x 203 x 117mm / 3.1 x 8.0 x 4.6" (with antenna and sunshade)
- **Weight**: 0.3kg / 0.6lbs

### RECEIVER
- **RX Sensitivity**: -81dBm
- **Demodulation**: GFSK
- **Data Rate**: 4 Mb/s
- **Supported Resolution**: VGA (640x480) up to 25 frames per second
- **Termination**: 2x BNC video
- **Power Requirement**: 9V DC +/- 5%
- **Power Consumption**: 270mA Max
- **Operating Temperature Range**: 14°F ~ 122°F / -10°C ~ 40°C
- **Dimensions (W x D x H)**: 53 x 137 x 86mm / 2.1 x 5.4 x 3.4” (with antenna attached)
- **Weight**: 0.1kg / 0.3lbs

### DVR Inputs & Outputs

#### 4 Channel DVR
- [Image of 4 Channel DVR]

#### 8 Channel DVR
- [Image of 8 Channel DVR]

#### 16 Channel DVR
- [Image of 16 Channel DVR]
WIRELESS SECURITY CAMERA SYSTEM

Product Information:

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CONFIGURATION</th>
<th>PACKAGE</th>
<th>W x D x H Inches &amp; mm</th>
<th>WEIGHT</th>
<th>CUBE</th>
<th>UPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>LX445W</td>
<td>4 ch ECO Blackbox3 DVR with 500GB HDD &amp; 4 x Wireless Cameras (LW2232PK2B)</td>
<td>Universal Retail Box</td>
<td>432mm x 332mm x 280mm/17.02” x 13.08” x 11.06”</td>
<td>4.4 kg/9.9 lbs</td>
<td>0.04 Cbm / 1.5 Cft</td>
<td>6-95529-00301-6</td>
</tr>
<tr>
<td>LX425W</td>
<td>4 ch ECO Blackbox3 DVR with 500GB HDD &amp; 2 x Wireless Cameras (LW2232PK2B)</td>
<td>Universal Retail Box</td>
<td>432mm x 332mm x 280mm/17.02” x 13.08” x 11.06”</td>
<td>3.9 kg/8.7 lbs</td>
<td>0.04 Cbm / 1.5 Cft</td>
<td>6-95529-00067-1</td>
</tr>
<tr>
<td>LH03045GC2W</td>
<td>4 ch ECO Blackbox3 DVR with 500GB HDD &amp; 2 x Wireless Cameras (LW2232PK2B)</td>
<td>Universal Retail Box</td>
<td>432mm x 332mm x 280mm/17.02” x 13.08” x 11.06”</td>
<td>3.9 kg/8.7 lbs</td>
<td>0.04 Cbm / 1.5 Cft</td>
<td>6-95529-00125-8</td>
</tr>
<tr>
<td>LH03045GC4W</td>
<td>4 ch ECO Blackbox3 DVR with 500GB HDD &amp; 4 x Wireless Cameras (LW2232PK2B)</td>
<td>Universal Retail Box</td>
<td>432mm x 332mm x 280mm/17.02” x 13.08” x 11.06”</td>
<td>4.4 kg/9.9 lbs</td>
<td>0.04 Cbm / 1.5 Cft</td>
<td>6-95529-00126-5</td>
</tr>
<tr>
<td>LH03041TC2W</td>
<td>4 ch ECO Blackbox3 DVR with 1TB HDD &amp; 2 x Wireless Cameras (LW2232PK2B)</td>
<td>Universal Retail Box</td>
<td>432mm x 332mm x 280mm/17.02” x 13.08” x 11.06”</td>
<td>3.9 kg/8.7 lbs</td>
<td>0.04 Cbm / 1.5 Cft</td>
<td>6-95529-00168-5</td>
</tr>
<tr>
<td>LH03041TC4W</td>
<td>4 ch ECO Blackbox3 DVR with 1TB HDD &amp; 4 x Wireless Cameras (LW2232PK2B)</td>
<td>Universal Retail Box</td>
<td>432mm x 332mm x 280mm/17.02” x 13.08” x 11.06”</td>
<td>4.4 kg/9.9 lbs</td>
<td>0.04 Cbm / 1.5 Cft</td>
<td>6-95529-00170-8</td>
</tr>
<tr>
<td>LH03081TC4W</td>
<td>8 ch ECO Blackbox3 DVR with 1TB HDD &amp; 4 x Wireless Cameras (LW2232PK2B)</td>
<td>Universal Retail Box</td>
<td>432mm x 332mm x 280mm/17.02” x 13.08” x 11.06”</td>
<td>4.4 kg/9.9 lbs</td>
<td>0.04 Cbm / 1.5 Cft</td>
<td>6-95529-00127-2</td>
</tr>
</tbody>
</table>

DVR INCLUDES

DVR with Pre-Installed HDD, HDMI Cable, Remote Control, Power adapter, Mouse, Ethernet Cable, Quick Start Guides.

LW2232PK2B

INCLUDES

2 x Indoor/outdoor cameras, 1 x Wireless receiver, 3 x Power adapters, 4 x Antennas

Disclaimers:

1. Requires a high speed internet connection and a router (not included). An upload speed of 1Mbps is recommended for the best video performance. Up to 3 devices may connect to the system at the same time.

2. Optimized when used with 960H compatible cameras. DVR is backwards compatible and supports different camera inputs: standard resolution and 960H.

3. High definition recording not supported, recording resolution is limited to a maximum of 960x480 per channel. Image quality and resolution is dependent on the type of camera connected to the DVR.

4. Recording time may vary based on recording resolution & quality, lighting conditions and movement in the scene.

5. Both firmware and software must be updated to latest version to ensure remote connectivity. Always update to the latest software (available at www.lorextechnology.com) after upgrading the DVR firmware.

6. At full signal strength, Limit number of obstructions to ensure best performance.

7. Stated IR illumination ranges are based on ideal conditions in typical outdoor night time ambient lighting and total darkness. Actual range and image clarity depends on installation location, viewing area and light reflection/absorption level of object.

8. Camera and receiver requires a wired connection to an electrical outlet (power adapters included).


10. Maximum wireless transmission range. Actual range dependent upon building materials and other obstructions in path of wireless signal.

* Using multiple receivers in close proximity to each other may cause a slowdown in frame rate performance.

** BlackBox is used solely as a marketing term and does not imply that the product can survive fire or extreme conditions. Use product in accordance with the instructions provided.

All trademarks belong to their respective owners. No claim is made to the exclusive right to use the trademarks listed, other than the trademarks owned by Lorex Technology Inc. We reserve the right to change models, configurations or specifications without notice or liability. Product may not be exactly as shown. Images are simulated.

Lorex Corporation, a division of FLIR Commercial Systems Inc.

© 2015 Lorex Corporation

www.lorextechnology.com