Performance Series IP Embedded NVR Kits

3 MEGAPIXEL FULL HD IP CAMERAS
AND 4 CHANNEL EMBEDDED NVR

Introducing the new Performance Series IP Embedded NVR kits from Honeywell. The kits feature 3 Megapixel Full HD IR-Illuminated IP66-rated cameras, and an embedded NVR with a user-friendly set-up and configuration wizard that takes you to live video in minutes. You have a choice of a 1 or 2 TB embedded NVR (Field upgradeable up to 12TB* storage max) and 4 IP ball cameras OR 4 IP bullet cameras. These bundled kits offer the perfect economical and flexible solution for small to medium sized businesses.

Fully-featured NVRs
- High decoding capability for full HD viewing and recording.
- View up to four channels simultaneously on your monitor.
- All channels live view and play back at 1080p @ full frame rate and 3MP @ 20 frames per second.
- Bidirectional audio communication for the NVR.

Fully-featured Cameras
- IR LEDs facilitate recording in dimly lit or nighttime scenes.
- Waterproof (IP66) camera housings are perfect for outdoor installations.
- Camera configurations to improve image quality and reduce image size, and to detect and respond to alarm events.
- 1/3" 3MP sensor, no distortion of image in 16:9 display, 12.5% more pixel density than conventional 3MP 4:3 cameras

Easy to Use
- The Quick wizard and PoE support of plug-and-play makes setup fast and easy.
- Physical installation within minutes with the help of comprehensive and easy-to-understand quick installation guides for the NVR and IP cameras.

Convenient, Flexible Storage Options
- Internal storage supports two HDDs up to 12 TB (6 TB each).*
- Store video clips and snapshots to external storage, such as the client’s PC, through the Internet.
- Store video clips and snapshots to an external network storage server such as an FTP site.
- Store video clips and snapshots to a USB memory device.

Dynamic, Accessible Monitoring
- Monitor from anywhere using the mobile apps for Apple and Android smartphones, tablet computers, and laptops.

Privacy Masking
- Conceal up to 4 areas of a scene from viewing and recording.

Safety Features
- Configurable motion detection and camera tamper detection settings, including configurable alarm alerts, such as automatic emails (with attached video or snapshot) and automatic alerts (such as buzzers or flashing lights),
- Remote configuration and firmware updating through Honeywell Viewer web client and the Honeywell Config tool. Password-protected access to the camera’s and NVR’s video and network setup.

Market Opportunities
The flexible storage options of the Performance Series IP Embedded NVR plus the fully-featured IP IR cameras make this kit perfect for many security applications.

<table>
<thead>
<tr>
<th>Camera Features</th>
<th>NVR Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 30 fps @ 1080p (1920x1080) or 20 fps @ 3MP (2304x1296) 16:9 display</td>
<td>• H.264/MJPEG dual codec decoding</td>
</tr>
<tr>
<td>• True Day/Night with Smart IR Technology</td>
<td>• HDMI/VGA simultaneous video output</td>
</tr>
<tr>
<td>• UL listed</td>
<td>• Supports 4 channels of alarm input and 2 channels of alarm relay output</td>
</tr>
<tr>
<td>• 3.6mm F 2.1 fixed lens (Bullet), 2.8mm F 2.1 fixed lens (Ball Camera)</td>
<td>• Supports IE, Safari, Firefox</td>
</tr>
<tr>
<td></td>
<td>• UL listed</td>
</tr>
</tbody>
</table>

* see user guide for compatible HD listings
Immediately Detect and Respond to Events

The Performance Series IP NVR/Cameras can be configured to automatically detect and respond to events such as motion in the scene, alarm inputs, a network failure and/or tampering. Automated responses include:

- Sending a notification through email, FTP and/or HTTP.
- Uploading still images at the time of the event through email and/or FTP.
- Recording a video clip of the event to the client’s PC or network-attached storage.
- Enabling a visual or auditory notification (a flashing light, bell or siren).
**Performance Series IP Embedded NVR Kits**  www.honeywellvideo.com

### NVR SPECIFICATIONS

#### System
- **Main Processor**: Dual-core embedded processor
- **Operating System**: Embedded LINUX

#### Video
- **IP Camera Inputs**: 4 channels
- **Bi-directional Audio**: 1 channel input; 1 channel output; RCA

#### Display
- **Interface**: 1 HDMI; 1 VGA
- **Resolution**: 1920 x 1080; 1280 x 1024; 1280 x 720; 1024 x 768
- **Display Split**: 1/4
- **OSD**: Camera title; Time; Video loss; Camera lock; Motion detection; Recording

#### Recording
- **Compression**: H.264 / MJPEG
- **Resolution**: 5MP (2560x1920); 4MP (2688x1520 / 2560x1440); 3MP (2304x1386); 1080p (1920 x 1080); 720p (1280 x 720); D1 (704 x 576 / 704 x 480); SXGA (800 x 600); 1.3 MP (1280 x 1024)
- **Recording Rate**: 100/120 fps @ 1080p
- **Bit Rate**: 48 to 8192 Kbps
- **Recording Mode**: Manual; Schedule (Regular [Continuous], Motion Detection, Alarm, Motion Detection+Alarm); Stop
- **Recording Interval**: 1 to 120 minutes (default: 60 minutes); Pre-recording: 1 to 30 seconds.

#### Video Detection and Alarms
- **Trigger Events**: Recording; Tour; Alarm; Email; FTP; Buzzer; Screen Tips
- **Video Detection**: Motion Detection; Motion Detection Zones (396: 22 x 18); Video Loss and Camera Blank; Privacy Masking
- **Alarm Input**: 4 channels
- **Relay Output**: 2 channels

#### Playback and Backup
- **Sync Playback**: 1/4
- **Search Mode**: Time/Date; Alarm; Motion Detection; Exact Search (accurate to a second)
- **Playback Function**: Play; Pause; Stop; Rewind; Fast play; Slow play; Full Screen; Backup
- **Backup Mode Compatibility**: USB Device; Network

### Network
- **Operating System**: Windows® XP; Windows Vista; Windows 7
- **CPU Requirements**: Pentium M 2.16 GHz or Intel Core 2 Duo 2 GHz
- **System Memory**: At least 2 GB
- **Network Card**: RJ-45 (10/100 Base-T)
- **Web Browser**: Microsoft Internet Explorer 6.0 or later; Mozilla Firefox®
- **Supported Protocols**: HTTP; TCP/IP; IPv4/IPv6; UPnP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP filter; PPoE; DDNS; FTP; Alarm server; IP search
- **Smart Phone Compatibility**: iOS; Android™

#### Storage
- **Internal Storage**: 2 SATA ports; up to 12 TB; RAID (redundancy)

#### Connectors
- **Ethernet**: 1 x RJ-45 port (10/100/1000 Mbps)
- **PoE**: 4 ports (IEEE802.3af)
- **USB**: 2 ports: USB 3.0 on rear panel; USB 2.0 on front panel
- **RS232**: 1 port, for PC communication
- **RS485**: 1 port

#### Electrical
- **Power Supply**: NVR: 12 V DC; 4 A external adaptor
- **PoE**: 48 V DC; 1.04 A external adaptor
- **Power Consumption**: 35 – 115 W depending on the number of HDD installed and PoE loading (maximum 393 Btu/hr)

#### Environmental
- **Operating Temperature**: 14°F to 131°F (-10°C to 55°C)
- **Storage Temperature**: -4°F to 158°F (-20°C to 70°C)
- **Humidity**: 10% to 90%

#### Physical
- **Dimensions**: 14.8x11.2x2.1 inches (375x285x52.6 mm)
- **Weight (without HDD)**: 4.41 pounds (2.0 kg)

#### Regulatory
- **Emissions**: FCC Part 15B, CE EN55022
- **Immunity**: CE EN50130-4
- **Safety**: EU: EN60950-1 North America UL listed to UL/CSA 60950-1

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* Actual bitrate is scene and motion dependent with H.264 stream.
** Some development might be required in specific user cases to support some of these protocols in the field as they mature over time.
# Performance Series IP Embedded NVR Kits

## Camera Specifications

<table>
<thead>
<tr>
<th>Camera</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Sensor</td>
<td>1/3” 3 megapixel progressive scan CMOS</td>
</tr>
<tr>
<td>Effective Pixels</td>
<td>2304 (H) × 1296 (V)</td>
</tr>
</tbody>
</table>
| Electronic Shutter Speed | HED3PR3: Auto/Manual, 1/3–1/30000 s  
HBD3PR1: Auto/Manual, 1–1/100000 s |
| Min. Illumination | 0.45 lux, F2.1 (Color); 0 lux (IR LEDs on) |
| S/N Ratio | More than 50 dB |

## Camera Features

- **IR Distance**: Up to 100 ft (30 m), depending on scene reflectance
- **Day/Night**: Auto(ICR)/Color/BW
- **Backlight Compensation**: BLC/HLC/DWDR
- **White Balance**: Auto/Manual
- **Gain Control**: Auto/Manual
- **Noise Reduction**: 3D
- **Privacy Masking**: Up to 4 areas

## Lens

<table>
<thead>
<tr>
<th>Lens</th>
<th></th>
</tr>
</thead>
</table>
| Focal Length | HED3PR3: 2.8 mm  
HBD3PR1: 3.6 mm |
| Max. Aperture | F2.1 |
| Focus Control | Fixed |
| Horizontal Angle of View | HED3PR3: 89°  
HBD3PR1: 81° |
| Lens Type | Fixed |

## Video

<table>
<thead>
<tr>
<th>Video</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compression</td>
<td>H.264(Main/High/Baseline Profile)/MJPEG</td>
</tr>
<tr>
<td>Resolution</td>
<td>3 MP (2304×1296), 1080p (1920×1080), 720p (1280×720), D1 (704×576/704×480), CIF (352×288/352×240)</td>
</tr>
</tbody>
</table>
| Frame Rate | Main Stream: 3 MP (1–20 fps), 1080p (1–25/30 fps)  
Sub Stream: D1, CIF (1–25/30 fps) |
| Bit Rate | H.264: 4–8192 kbps |
| Corridor Mode | Support |

## Network

<table>
<thead>
<tr>
<th>Network</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet</td>
<td>RJ-45 (10/100Base-T)</td>
</tr>
<tr>
<td>Protocol</td>
<td>IPv4/IPv6, HTTP, HTTPS, TCP/IP, UDP, UPnP, ICMP, IGMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS</td>
</tr>
<tr>
<td>Compatibility</td>
<td>ONVIF Profile S, CGI</td>
</tr>
<tr>
<td>Max. User Access</td>
<td>20 users</td>
</tr>
<tr>
<td>Mobile App</td>
<td>HonView Touch for iPhone, iPad, Android Phone and Tablet</td>
</tr>
</tbody>
</table>

## General

<table>
<thead>
<tr>
<th>General</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>PoE (802.3af), 12 V DC</td>
</tr>
</tbody>
</table>
| Power Consumption | 4.7 W max. (IR LEDs on)  
8.5 W max. (IR LEDs on) |
| Working Environment | –22°F to 140°F (–30°C to 60°C); 10% to 100% RH, condensing |
| Ingress Protection | IP66 |
| Vandal Resistance | IK10 |
| Dimensions | 4.33 × 3.19 in. (110 × 81 mm)  
4.8 × 3.5 in. (122 × 89 mm) |
| Weight | 0.86 lb (0.39 kg)  
1.1 lb (0.5 kg) |
| Regulatory | FCC, Part 15B, Class B |
Embedded NVR

Dimensions:
- 14.8" (375.0 mm)
- 2.0" (50.0 mm)

HED3PR3 Ball Camera

Dimensions:
- 4.25" (108.0 mm)
- 3.3" (84.0 mm)

HBD3PR1 Bullet Camera

Dimensions:
- 6.50" (165.0 mm)
- 2.76" (70.0 mm)
### ORDERING

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEN04112EB</td>
<td>H.264 4CH NVR 1 TB and 4 pcs H.264 3MP IR BALL Cameras</td>
</tr>
<tr>
<td>HEN04122EB</td>
<td>H.264 4CH NVR 2 TB and 4 pcs H.264 3MP IR BALL Cameras</td>
</tr>
<tr>
<td>HEN04112BB</td>
<td>H.264 4CH NVR 1 TB and 4 pcs H.264 3MP IR BULLET Cameras</td>
</tr>
<tr>
<td>HEN04122BB</td>
<td>H.264 4CH NVR 2 TB and 4 pcs H.264 3MP IR BULLET Cameras</td>
</tr>
<tr>
<td>HEN04112</td>
<td>H.264 4CH NVR 1 TB</td>
</tr>
<tr>
<td>HEN04122</td>
<td>H.264 4CH NVR 2 TB</td>
</tr>
<tr>
<td>HED3PR3</td>
<td>H.264 2.8 mm Fixed Lens IR BALL Camera</td>
</tr>
<tr>
<td>HBD3PR1</td>
<td>H.264 3.6 mm Fixed Lens IR BULLET Camera</td>
</tr>
</tbody>
</table>

### Accessories

| HEJB | Back box for HED3PR3 and HBD3PR1 |

### Recommended Cables

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description (Application)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6360</td>
<td>Cat 6 Riser (Cameras)</td>
</tr>
<tr>
<td>6361</td>
<td>Cat 6 Plenum (Cameras)</td>
</tr>
<tr>
<td>2101</td>
<td>22/2 Solid Riser (Alarm Inputs)</td>
</tr>
<tr>
<td>3101</td>
<td>22/2 Solid Plenum (Alarm Inputs)</td>
</tr>
<tr>
<td>2114</td>
<td>18/2 Stranded Riser (Alarm Outputs)</td>
</tr>
<tr>
<td>3114</td>
<td>18/2 Stranded Plenum (Alarm Outputs)</td>
</tr>
</tbody>
</table>

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

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For more information

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