47”, 55” and 75” LED-backlit, high-brightness LCD displays ideal for high ambient light installations

NEC LCD High Brightness Displays
High brightness panels, extended runtimes and superior engineering make these displays ideal for high ambient light installations such as quick serve restaurant menuboard or front window facing signage.

### High Brightness, High Temperature Panel

The X754HB, X554HB and X474HB are designed with a brightness that can be seen in applications where the highest amount of ambient light is present. This includes areas where the sun will be a factor and could possibly tarnish the image on the display including indoor retail shop windows or outdoor types of applications when coupled with outdoor enclosures. While traditional televisions or even mainstream commercial displays range from 200 to 700 cd/m² of brightness, the NEC X-HB lineup ranges from 2000 to 2700 cd/m² which is more than enough for crystal clear visibility during all times of day. On top of this, these panels have a higher resistance to the “blackening effect” often produced by direct sunlight on a liquid crystal panel. This is due to a higher temperature transition necessary to make the liquid crystals change from nematic to isotropic.

### Quarter Lambda Polarizer Film

Conventional displays have panels that, when turned into portrait orientation, will have their light blocked by polarizing filters - such as certain sunglasses. The NEC X-HB series contains a special quarter lambda polarizer film that allows light to exit the panel in a way that the content will be clearly seen on the display regardless of orientation or polarized sunglasses.

### Advanced Heat Management

Monitoring and managing the temperature of each display is crucial to secure reliability and longevity. An industrial-strength, premium-grade panel with additional thermal protection, internal temperature sensors with self-diagnostics, and fan-based technology allows for 24/7 operation, and protects your display investment.

Without heat management, the displays could retain harmful heat within the chassis and behind the panel. This damaging heat will lower the picture quality and life expectancy of the product. However, NEC’s advanced heat management ensures active heat dissipation through a fan based technology. Integrated cooling fans automatically turn on and stay on when high internal temperatures are detected. These will stay on until the heat is properly dissipated and the display remains under proper temperature thresholds.
Human Sensor and Ambient Light Sensor

This new optional human (motion) sensor accessory (KT-RC2) helps to deliver creative digital signage to end users by allowing for dynamic control of brightness, audio and source inputs while saving operating costs. Auto dimming adjusts the backlight of the LCD automatically depending on the amount of ambient light.

NaViSet Administrator 2

This software is an all-in-one remote support solution that runs from a central location and provides monitoring, asset management and control functionality of the majority of NEC display devices and Windows computers. It is ideal for multi-device installations over larger infrastructures.

Dedicated Color Calibration Software

As the brightness and color temperature of the LCD change with time, colors may not match across multiple screens. The NEC Display Wall Calibrator software ensures color uniformity and fidelity across multiple screens, creating a perfectly matched image in menuboard or tiled environments.

Intelligent Wireless Data Function

The built-in near field communication (NFC) chip allows data to be read and written via a mobile phone or tablet PC. Users can significantly reduce installation costs as displays can be easily configured and serviced using the NEC NFC Android app. This is extremely useful for larger rollouts as it can be utilized even when the display is powered off.

Expansion slots

The NEC HB displays support Intel’s Open Pluggable Specification (OPS), and interface expansion slots to provide the flexibility customers need.

Proof of Play

This function provides accurate proof that displays are working as established when checking from an external location. Information regarding video source, time on, audio source and more can be pulled through the display when coupled with NaViSet Administrator 2.

Other Useful Features and Functions

- Landscape/portrait capable
- Scheduler with real-time clock
- Intelligent power management system
- Power on delay
- Screen saver function
- Aspect ratio control
- Memo function
- Carbon footprint meter
- PIP, PBP and Side by Side options
- Built in speakers
- Point zoom
- Control lock function
- 6-axis color adjustments and sRGB standard
- Advanced video settings (Noise reduction, adaptive contrast)
- Color temperature adjustment
- Programmable gamma setting (3 settings)
- DICOM simulation
- Plug and play (DDC/C, DDC2B)
- HDCP (High-bandwidth Digital Content Protection) through certain inputs
- Ethernet and RS-232C control and communication
- CRESTRON ROOMVIEW™
- AMX Discovery HTTP server
- PJLink
- Self-diagnosis
- Status log function
- Firmware update over LAN
- Metal rear cabinet with VESA Standard Mounting Interface
- Carrying Handles for ease of installation
**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>X474HB</th>
<th>X554HB</th>
<th>X754HB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LCD Module</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panel Technology</td>
<td>5-P5</td>
<td>5-PW</td>
<td>5-PW</td>
</tr>
<tr>
<td>Viewable Image Size</td>
<td>47”</td>
<td>55”</td>
<td>75”</td>
</tr>
<tr>
<td>Native Resolution</td>
<td>1920 x 1080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brightness (Typical/Max)</td>
<td>1600 cd/m² / 2000 cd/m²</td>
<td>2000 cd/m² / 2700 cd/m²</td>
<td>2000 cd/m² / 2500 cd/m²</td>
</tr>
<tr>
<td>Contrast Ratio (Typical)</td>
<td>1300 : 1</td>
<td>3000 : 1</td>
<td></td>
</tr>
<tr>
<td>Viewing Angle</td>
<td>178° Vert., 178° Hor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>16:9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Displayable Colors</td>
<td>More than 1.07 billion (10-bit)</td>
<td>More than 16.7 million (8-bit)</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Landscape/Portrait</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Connectivity**

- PC/Mac Signal Compatibility: Yes
- Input Terminals:
  - Digital: DisplayPort, HDMI, DVI-D
  - Analog: VGA 15-pin D-sub
  - Audio: Mini Jack, DisplayPort Audio, HDMI Audio
- External Control:
  - RS-232C, LAN, DDC/CI

**Output Terminals**

- Digital: DisplayPort (HDMI, DVI-D or Option Signals out of this port)
- Analog:
  - Audio Mini Jack, External Speaker Jack (2), HDMI Audio (Through DisplayPort Out), DisplayPort Audio
- External Control: LAN

**Power Consumption**

- On (Typical): 190W 310W 540W
- Power Management: <2W <2.5W <2.5W
- Current Rating: 4.2A @ 100 - 120V, 1.7A @ 220 - 240V

**Physical Specifications**

- Bezel Width (L/R, T/B): 19.3mm/19.3mm, 19.3mm/19.3mm, 19.5mm/19.5mm, 19.5mm/19.5mm
- Operating Temperature: 41 - 104°F / 5 - 40°C
- Operating Altitude: 13,780 ft. / 4200m
- Operating Humidity: 20 - 80%
- VESA Hole Configuration: 300 x 300mm (M6 x 4), 400mm x 400mm (M6 x 4), 400mm x 400mm (M8 x 4)
- Net Weight (without stand): 58.4lbs. / 26.5kg, 71.9lbs / 32.6kg, 127.7lbs / 57.9kg

**Input Panel**

1. Vacation Switch
2. External Speaker Terminal
3. Audio Mini Jack Out
4. USB Service Port
5. LAN Ports
6. Audio Mini Jack In
7. RS-232C In
8. Remote In
9. VGA D-Sub In
10. DisplayPort In/Out
11. HDMI In
12. DVI-D In

**Options**

- **OPS-PC's**
- **OPS-DRD**
- **OPS-PCAEO:PS/PH**
- **OPS-PCIB:PS**

**SDI**

- HD-SDI: SB-01HC
- 3G-SDI: SB-04HC
- HD-SDI: SB-07BC

**Interface Extension Board**

- Digital Video: SB3-D81
- Analog Video: SB3-A81
- Analog Video: SB3-A82

**Sensor Kit**

- Human (Motion) / Ambient Light / IR Remote

**Stand**

- X474HB: ST-4620
- X554HB: ST-5220
- X754HB: ST-801

**Wall Mount**

- X474HB: WMK-3257
- X554HB: WMK-3257
- X754HB: WMK-6598

For more details, please visit [http://www.necdisplay.com](http://www.necdisplay.com)