# KLH-40X1
Public Display

SRS○ WOW    *BBE* DIGITAL    HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

# Simple, Affordable, Dynamic Visual Communications are Here – the KLH-40X1 40" Public LCD Display

Today, there is a growing demand within the market for professional displays that offer both cost efficiency and high performance.  To fulfill this demand, Sony introduces the KLH-40X1 40"* public LCD display.  Incorporating a display stand and stereo speakers into its compact and stylish body, the KLH-40X1 offers superb picture quality at WXGA resolution.  As standard, it supports a variety of analog interfaces and two HDMI™ (High-Definition Multimedia Interfaces) digital interfaces – satisfying customer demand for various video sources.  In addition, it also supports RS-232C and Control S interfaces to connect to professional devices for even more system versatility.

With all the versatile features and functionality of Sony's professional public displays, the KLH-40X1 offers simple, yet extremely attractive visual communications for locations ranging from retail shops and enterprises to hospitality venues.

\* Viewable area, measured diagonally

# FEATURES

## High Picture Quality

The KLH-40X1 incorporates a high-quality 40" LCD panel* with a native resolution of WXGA (1366 x 768) and a high contrast ratio of 1300 : 1, offering extremely crisp and clear images.

\* Viewable area, measured diagonally

## All-in-one Design

The KLH-40X1 comes with a built-in display stand and built-in stereo speakers.  This compact and stylish all-in-one design allows the display to fit in well to any installation location and also simplifies the installation of the digital signage system.

## Multiple Inputs and High-performance Scalar

The KLH-40X1 accepts a variety of signals ranging from SDTV to HDTV, and RGB computer signals with resolutions up to WXGA (1360 x 768).  It can accept a range of analog signals such as RGB/component via a D-sub 15-pin connector, S-Video via a mini DIN 4-pin connector, and composite video via an RCA pin jack.  In addition, it can also accept digital signals via two HDMI (High-Definition Multimedia Interface) interfaces.  Furthermore, the KLH-40X1 integrates a high-performance scalar that can provide accurate pixel-by-pixel image reproduction, offering optimum image quality whatever the signal format.

### ■ Preset Video Signals

| Input Signal Formats | Available Interfaces | | |
|---|---|---|---|
| | Composite Video/S-Video | Component/RGB | HDMI |
| 480/60i | ● | ● | ● |
| 480/60P | | ● | ● |
| 575/50i | ● | ● | ● |
| 576/50P | | ● | ● |
| 720/50P | | ● | ● |
| 720/60P | | ● | ● |
| 1080/50i | | ● | ● |
| 1080/60i | | ● | ● |
| 1080/50P | | | ● |
| 1080/60P | | | ● |

### ■ Preset Computer Signals

| Input Signal Formats (RGB) | fH (kHz) | fV (Hz) | Resolution (Active Pixels) |
|---|---|---|---|
| VGA-1 (VGA 350) | 31.5 | 70 | 640 x 350 |
| 640 x 480 @60Hz (VESA STD) | 31.5 | 60 | 640 x 480 |
| Mac 13″ | 35.0 | 67 | 640 x 480 |
| VGA (VGA TEXT) | 31.5 | 70 | 720 x 400 |
| 800 x 600 @60Hz (VESA STD) | 37.9 | 60 | 800 x 600 |
| Mac 16″ | 49.7 | 75 | 832 x 624 |
| 1024 x 768 @60Hz (VESA STD) | 48.4 | 60 | 1024 x 768 |
| 1024 x 768 @75Hz (VESA STD) | 60.0 | 75 | 1024 x 768 |
| 1024 x 768 @85Hz (VESA STD) | 68.7 | 85 | 1024 x 768 |
| 1280 x 1024 @60Hz (VESA STD) | 64.0 | 60 | 1280 x 1024 |
| 848 x 480 @60Hz (VESA STD) | 29.8 | 60 | 848 x 480 |
| 848 x 480 @60Hz (VESA STD) | 29.5 | 60 | 848 x 480 |
| 848 x 480 @75Hz | 37.7 | 75 | 848 x 480 |
| 1280 x 768 @60Hz | 47.8 | 60 | 1280 x 768 |
| 1280 x 768 @60Hz | 47.4 | 60 | 1280 x 768 |
| 1360 x 768 @60Hz | 47.7 | 60 | 1360 x 768 |
| 1360 x 768 @60Hz | 47.4 | 60 | 1360 x 768 |

## External Control

The KLH-40X1 is equipped with an RS-232C interface, allowing full control of the display from external devices such as the VSP-NS7 Digital Signage Player. In addition, this display can receive command signals from its built-in IR receiver and output these to external devices connected to it via a Control S interface, allowing for IR remote controllers to wirelessly operate the devices.

## Picture and Picture Function

This function allows the KLH-40X1 to simultaneously display two pictures side by side that originate from separate sources. Each picture is variable in size.

## High-quality Sound

The built-in speakers of the KLH-40X1 provide high-quality sound, thanks to BBE® and SRS WOW® technologies.

## On/Off Timer

The display can be programmed to turn on or off at a precise time (hh:mm) – either every day or on specified days of the week.

## Control Panel Lock

This function can disable the control panel to prevent unauthorized changes to the display settings.



### ■ Signal Combinations

| | | HD 15 | | HDMI 1 | HDMI 2 | VIDEO | |
|---|---|---|---|---|---|---|---|
| | | RGB | Component | | | S-Video | Compsite |
| HD 15 | RGB | | | ● | ● | | |
| | Component | | | ● | ● | | |
| HDMI 1 | | ● | ● | | | ● | ● |
| HDMI 2 | | ● | ● | | | ● | ● |
| VIDEO | S-Video | | | ● | ● | | |
| | Composite | | | ● | ● | | |

# OPTIONAL ACCESSORIES



**VSP-NS7**
Digital Signage Player

# CONNECTORS

# SPECIFICATIONS

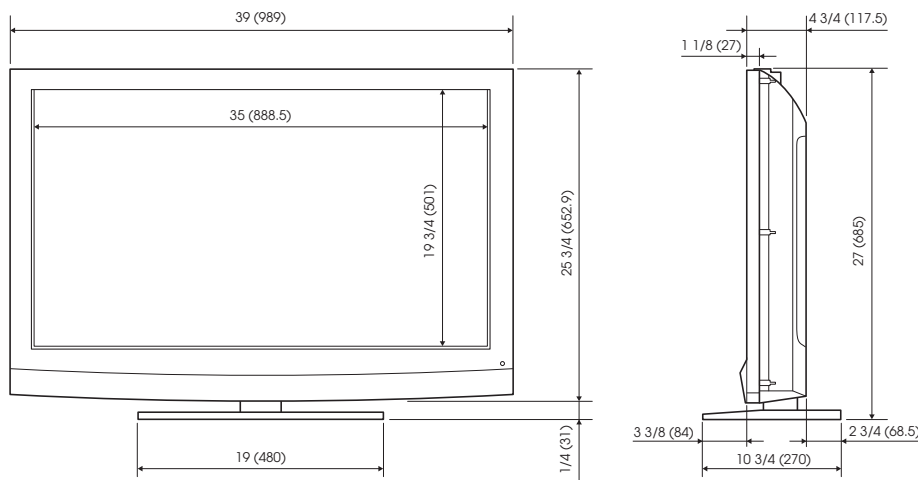| KLH-40X1 | | |
|---|---|---|
| **Picture Performance** | | |
| Panel | Resolution (H/V) | 1,366 x 768 pixels, WXGA |
| | Pixel pitch | 1/40 x 1/40 inches (0.6 x 0.6 mm) |
| | Picture size (H/V) | 34 7/8 x 19 5/8 inches (885 x 498 mm) |
| | Panel size (diagonal) | 40-inch (1,016 mm)* |
| | Contrast ratio | 1300 : 1 |
| | Type | a-Si TFT Active Matrix LCD |
| Acceptable signals | | Refer to "Preset Video Signals" and "Preset Computer Signals" |
| Color system | | NTSC / PAL / PAL-M / PAL-N / NTSC4.43 / PAL60 |
| Sampling rate | | 13.5 to 140 MHz |
| **Input and Output** | | |
| AUDIO | Common audio in | Stereo mini jack (x1), 500 mV rms, high impedance |
| HD15 | RGB/Component in | D-sub 15-pin (x1) |
| HDMI 1/HDMI 2 | HDMI in | HDMI (x2) |
| VIDEO | S-Video in | Mini DIN 4-pin (x1) |
| | | Y: 1.0 Vp-p ±2 dB, sync negative, 75 Ω terminated |
| | | C: 0.286 (NTSC)/ 0.3 (PAL) Vp-p ±2 dB, sync negative, 75 Ω terminated |
| | Video in | RCA pin jack (x1), composite video, 1.0 Vp-p ±2 dB, sync negative, 75 Ω |
| | Audio in (L/R) | Stereo mini jack (x2), 500 mV rms, high impedance |
| REMOTE | RS-232C | D-sub 9-pin (x1) |
| CONTROL S | Control S out | Mini jack (x1) |
| **Speaker Output** | | |
| Speaker output | Bult-in speaker | Stereo type, 10 W + 10 W, adequiate load impeadance: 8 to 16 Ω |
| **General** | | |
| Power requirements | | AC 100 to 240 V, 50/60 Hz, 2.3 A |
| Power consumption | | 220 W |
| Operating temperature | | 32 to 95 °F (0 to 35 °C) |
| Storage temperature | | -4 to 140 °F (-20 to 60 °C) |
| Humidity | | 20 to 90%, no condensation |
| Dimensions (W/H/D) | | 39 x 27 x 10 5/8 inches (989 x 685 x 270 mm) (excluding protruding parts) |
| Weight | | 61.7 lb (28.0 kg) |
| **Supplied Accessories** | | |
| AC power cord (1), Cable holder (1), HD15-component cable, Remote Commander™ RM-FW001 (1), Size AA (R6) batteries (2), Operating instructions (1) | | |
| **Regulation Compliance** | | |
| UL60950-1, CSA No.60950-1-03 (c-UL), FCC Class B, IC Class B, EN 60950-1 (NEMKO), CE, C-Tick | | |

\* Viewable area, measured diagonally

## Dimensions

39 (989)
35 (888.5)
19 3/4 (501)
25 3/4 (652.9)
19 (480)
1 1/4 (31)

4 3/4 (117.5)
1 1/8 (27)
27 (685)
3 3/8 (84)
2 3/4 (68.5)
10 3/4 (270)

Unit: inches (mm)

**SONY®**

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