## www.optoma.com



# ZH400USTi

# Superb for signage - 20,000 hours full brightness\*\*

- 20,000 hours maintenance-free laser light source at full brightness\*\*
- Dust resistant Independently tested, IP5X certification for total reliability
- 4000 lumens laser 1080p DLP ultra short throw projector
- Versatile installation Portrait and downward projection





# ZH400USTi

The ZH400USTi is powered by long-lasting, low maintenance DuraCore laser light source. The lamp-less and filter-free design vastly reduces running costs for a low total cost of ownership.

Weighing only 5.6kg, this interactive projector can be mounted just centimetres away from a wall or surface and can project an image size of over 100 inches (254cm).

Supporting 24/7 operation and versatile orientation, the ZH400USTi is a flexible, powerful and bright ultra short throw projector which makes for a superb signage solution where space or accessibility can be limited, such as shop windows or retail displays.

#### **DuraCore**

Industry leading lifetime is achieved using Optoma's DuraCore technology. Implementing advanced laser diode cooling techniques and an innovative dust resistant design. 20,000 hours provides a staggering 13 years of normal use\*1 or 2.2 years if run continuously 24/7.



\*16 hours per day, 250 days per year

#### Museums, exhibitions and visitor centres

Interactive exhibits are a guaranteed way to capture interest at visitor centres. With stunning visuals now a frequent requirement for these types of installation, the ZH400USTi high resolution makes it perfect for the task. With its ability to perform rear and downward projection, and also to operate in 'portrait' mode, the ZH400USTi is perfect for large, touch-sensitive displays, offering a fully interactive experience to visitors.

#### Retail displays and digital signage

The ultra-high 100,000:1 contrast ratio ensures no detail is lost in the image which is key for corporate presentations, retail signage and projection mapping where every detail matters. The 4000-lumen light source delivers exceptionally consistent brightness, rendering striking & vibrant images, even in high levels of ambient light. Large images with a diagonal measurement of 100" can be generated from a throw distance of just 31cm.

#### Classrooms

Ideal for classrooms, the interactive 'TouchBeam' technology allows up to 10 pupils to participate, using only a finger. The DuraCore laser light engine replaces the traditional lamp based projector removing the need for replacement lamps, maintaining low running costs. Unlike lamp based projectors, the DuraCore laser supports instant power on/off. The efficiency of the laser helps the projector run more quietly with lower energy consumption and heat dissipation.

#### **Control Rooms**

High resolution and high contrast make the ZH400USTi suitable for installation in control rooms, where fine lines and small text must be clearly visible. In addition, the long lifespan of the DuraCore laser light source and DLP panel makes the projector capable of 24/7 operation, and therefore especially suited to 'always on' environments.

#### Simulators

As industrial-grade simulators for aircraft, track cars and commercial vehicles become increasingly prevalent, the demand for ultra-high resolution projectors capable of maintaining high consistent brightness levels increases. Simulators can now be implemented using fewer projectors, reducing overall complexity in terms of hardware. Thanks to the native 1920 x 1080 resolution, even complex, computer-generated images can be displayed with remarkable clarity.

#### **Engineering and Design**

CAD environments, architecture and 3D modelling all require projected images with absolute clarity and accuracy. The projector is fully 3D compatible, and can be used in conjunction with active shutter glasses to generate convincing 3D visuals.

#### Ultra short throw lens

High quality UST lens delivers large images from a short projection distance. Presenter dazzle and image shadows are avoided.



#### **Exemplary service**

A huge range of service centres across Europe and extensive warranty and servicing packages.



#### Bright, detailed rich in colour images

4000 lumens, Full HD 1080p, 100,000:1 contrast ratio. Wide coverage of Rec. 709 colour gamut.



#### **Dual HDMI inputs**

Project crystal-clear images using either of the twin HDMI inputs. HDMI V1.4a is supported, including MHL on one of the inputs. Computer and HD video sources are supported, while separate audio cables are no longer required.



#### TouchBeam interactive technology

Allows several people to work on the screen concurrently, with no need for an electronic whiteboard or pen.



#### **Image quality**

Image quality is of paramount importance for every installation product in the ProScene range. The ZH400USTi delivers deep rich and colourful images whilst maintaining an exceptional high level of consistent brightness that will captivate and engage the audience.

ProScene uses DLP® technology for its image quality and unmatched reliability. The reflective nature of DLP® micro-mirror technology provides highly efficient bright images with great contrast whilst maintaining precise colour accuracy and natural, real-world colour reproduction. For demanding professional applications, the proven reliability of DLP® technology makes it the obvious choice.

#### **Projector security**

The ZH400USTi features a Kensington Lock slot to deter theft, while password protection prevents unauthorised use.

#### **Dust resistant optical engine**

The ZH400USTi has been independently tested and certified with an IP5X dust resistance rating. Outstanding resistance to dust in combination with exceptional brightness ensures industry leading durability; paramount for 24/7 maintenance free operation in challenging environments; the dust resistance was tested by an independent



laboratory in accordance with IEC standard 60529 and was certified with an IP5X rating. The dust resistant filter-free design prevents dust and dirt from affecting the system, ensuring optimal image quality with minimal maintenance.

#### **Perfect projection**

Misaligned images can be quickly adjusted with vertical keystone correction.



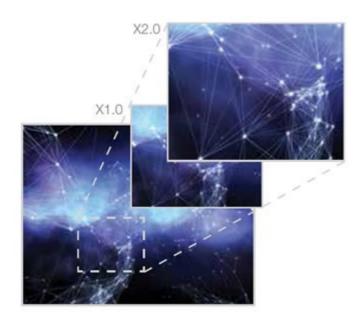
#### **Audio capabilities**

The powerful built in 10W loudspeaker can be used in conjunction with a microphone, to capture the attention of the audience. Expensive additional audio hardware and cabling can therefore be eliminated in smaller meeting rooms.

For larger installations, audio inputs from a computer or video source can also be handled, allowing the ZH400USTi projector to act as an audio switcher and volume controller, alongside an external audio amplifier and speakers.

#### Enlarge your images

The digital zoom feature can be used to increase the magnification of a particular area, allowing explanation of the projected image in more detail.



### Versatile Installation

Images can be projected in 'portrait mode', where the projector is operated on its side, to produce a tall, thin image. This is perfect for digital signage applications, particularly in retail premises.



### Total cost of ownership

For demanding applications the total cost of ownership of a projector is not in the purchase cost but in expensive maintenance and service. ProScene projectors require very little maintenance; have no user serviceable parts inside and no filters that require periodic replacement. The result is low cost, predictable service cycles, enabling planned down time to be minimised.

#### Enhanced colour gamut

The ZH400USTi produces superb colour accuracy and powerful colour performance because of the wide coverage of Rec. 709 colour gamut typically associated with DLP® technology.

## System integration and control

Multiple ZH400USTi projectors can be monitored over the LAN and can also send an email alert via Crestron RoomView in the event of an error or a lamp failure. Projector status can be monitored via a web browser, while Extron IP Link, AMX Device Discovery and PJ-Link protocols offer remote management of most functions across a network, keeping you in control wherever you are.



Global monitoring of all AV devices



Email alerts and instant notifications - help desk requests, service reminders, device failure or theft



Track projector light source usage



Event scheduling

#### **Ultimate control**

Cut up to 30% from your energy bills using 24-hour automated power scheduling to ensure that projectors power off when not in use.

|       | Power on/off | <br>Holp Schedule | Emergency Type | Power Status | 5 |
|-------|--------------|-------------------|----------------|--------------|---|
| EW965 |              | <br>1             | 6              | Normal       |   |
| EW865 |              | 1                 | ¥              | Low Power    |   |

Download Crestron RoomView® Express for free at <u>www.crestron.com/getroomview</u>

## Specification

| Display Technology                    | 1 x 0.65" DLP® chip  |
|---------------------------------------|--|
| Native Resolution                     | 1080p 1920 x 1080  |
| Brightness <sup>1</sup> (Bright Mode) | 4000 ANSI lumens   |
| Contrast                              | 100,000:1  |
| Lamp Life <sup>2</sup> Bright         | 0 (hrs)  |
| Throw Ratio                           | 0.25:1   |
| Zoom Type                             | 1.0x fixed   |
| I/O Connectors                        | 2x HDMI V1.4a, 2x VGA, 2x 3.5mm Audio, VGA-out, 3.5mm Audio out, RJ45, RS232, 12v Trigger, Mini USB (service)              |
| Speaker                               | 10W  |
| Audio                                 | 10W  |
| Keystone Correction                   | ±15° V, ±15° H   |
| Weight (kg)                           | 5.6  |
| Dimensions (W x D x H) (mm)           | 382 x 310 x 124mm  |
| Aspect Ratio                          | 16:9 native, 16:10 / 4:3 compatible  |
| Computer Compatibility                | UXGA, SXGA, WXGA, HD, XGA, SVGA, VGA, Mac  |
| Video Compatibility                   | PAL (B, D, G, H, I, M, N, 576i/p), NTSC (M, 4.43/3.58 MHz, 480i/p), SECAM (B, D, G, K, K1, L) HD (1080i, 720p)             |
| 3D Support                            | The 3D features of Optoma projectors can only be used with compatible 3D content. Typical applications include use with 3D |
|                                       | educational or 3D design and modelling systems. 3D television broadcast systems, (SKY in the UK), Blu-ray 3D™ and 3D       |
|                                       | games from the Sony® PS3 and Microsoft® Xbox 360 are now supported as part of the HDMI v1.4a specification.                |
| 3D Compatibility                      | Side-by-Side:1080i50 / 60, 720p50 / 60   |
|                                       | Frame-pack: 1080p24, 720p50 / 60   |
|                                       | Over-Under: 1080p24, 720p50 / 60   |
| Horizontal Scan Rate                  | 15.3 - 91.1kHz   |
| Vertical Scan Rate                    | 24 - 85Hz (120Hz for 3D)   |
| Displayable Colours                   | 1.07 billion   |
| Noise Level (Eco mode)                | 30dB   |
| Power Supply                          | 100 - 240V, 50 - 60Hz  |
| Lamp Type                             | Laser phosphor   |
| Operating Conditions                  | 5°C - 40°C, 90% max humidity, 3000m max altitude   |
| Security                              | Security bar, Kensington lock, Password protection   |
| Remote Control                        | Yes  |
| Standard Accessories                  | AC mains power cable, VGA cable, USB cable, Quick start guide, User manual (CD)  |
| Optional Accessories                  | Wall mounting bracket, WPS Wireless adaptor  |
| Optional Wireless                     | Yes  |
| 360' Operation                        | No - Downward projection only  |
| Portrait Mode                         | Yes  |
| Warranty                              | 3 Years  |
| RoHS                                  | Compliant  |
| Projection method                     | Front, rear, ceiling mount, table top, downward, portrait  |
| Features                              | 1080p resolution, ultra short throw, laser phosphor light engine   |
| Warranty                              | 5 Years/12,000hrs (light source)/ 3 Years/12,000hrs (projector)  |
| Colour Guarantee <sup>3</sup>         | 5 years  |



#### Optoma Europe Ltd. 42 Caxton Way, Watford Business Park, Watford, Hertfordshire, UK. WD18 8QZ www.optoma.co.uk

<sup>1</sup>Lamp based projectors brightness and lifetime will vary depending on selected projector mode, environmental conditions and usage. As is common with all lamp based projectors, brightness will decrease over the lamp lifetime. LED projectors do not have a replaceable lamp and the brightness does not decay significantly over the product lifetime.

<sup>2</sup>Typical lamp life achieved through testing. Will vary according to operational use and environmental conditions

Copyright © 2017, Optoma Europe Limited. Optoma, NuForce and Nu are registered trademarks of Optoma Corporation. Optoma Europe Limited is the licensee of the registered trademarks. All other product names and company names used herein are for identification purposes only and may be trademarks or registered trademarks of their respective owners. Errors and omissions excepted, all specifications are subject to change without notice. DLP®, BrilliantColor™ and the DLP logo are registered trademarks of Texas Instruments. All images are for representation purposes only and may be simulated. All content on this site is protected by copyright.

Privacy Terms and conditions

Registered Office: 42 Caxton Way, Watford Business Park, Watford. WD18 8QZ . Registered No. 3399395

26/04/2017 12:55