EX685UT
DLP® Projector

Ultra Short Projection

- 60” image from just 46cm away
- Shadow-free images on projection surfaces
- Bright images, vivid colours – 3000 ANSI Lumens, Native XGA
- Crestron RoomView® – RJ45 control and monitoring
- Impressive sound quality – integrated 10W speaker



3D Ready

CRESTRON RoomView® connected

EX685UT

Presentation for the 21st Century
3D-Ready EX685UT Ultra Short Throw Projector

Present without distractions using the EX685UT ultra short throw projector. The specially designed lens produces huge images from an extremely short distance allowing you to stand closer to the screen, preventing shadows and screen glare.

Ideal for almost any room in educational and corporate environments, the EX685UT makes the most of the available space for installations using screens and interactive whiteboards.

Captivate your audiences', increase their learning potential and help improve results with lessons in incredible 2D or 3D.

Using the specially designed wall mount* and clever cable management system the EX685UT is simple to install. Once in place the many security features ensure the projector is safe and secure.

Designed with the user in mind, the EX685UT with 3000 ANSI Lumens of brightness incorporates extensive connectivity, powerful 10W stereo speakers and Crestron RoomView® control to maintain and monitor the projector over the network. The environmentally friendly EX685UT has energy saving features including <0.5W standby mode and auto power off saving you both time and money. Our unique Optoma Colour guarantee ensures hassle-free, long-lasting projection.

ULTRA SHORT THROW BENEFITS

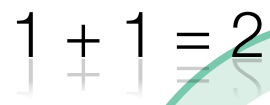
PROBLEMS	SOLUTIONS ✓
LOCATION Shadows from the presenter or the audience appear on the screen. Light projecting directly into the eyes of anyone stood close to the screen surface. Projector positioned nearly 2m away to achieve a large screen size.	**ULTRA SHORT THROW (UST)** Position projector closer to the screen to eliminate shadows and stop light from shining in the presenter's eyes. UST projectors save space and enable very large projection displays even in the smallest of rooms.
SECURITY Lack of security features means projectors are vulnerable to vandalism and theft.	**PEACE OF MIND** Fully featured UST projectors are fitted with a security bar, Kensington™ lock and password protection. Cables are fully protected inside a concealed area within the projector to ensure a neat, tamper proof installation.
OLD TECHNOLOGY 2D projection fails to deliver the information needed to ensure it makes a real impact.	**LATEST TECHNOLOGY** Excite and engage your audience with the latest 3D projection. Tried and tested 3D technology proven to improve results. 3D projection is vital to creating the best classroom or meeting room environment.

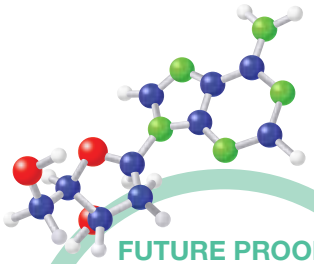
ULTRA SHORT THROW LENS

Position the EX685UT even closer to the wall so that the light beam doesn't shine into your eyes. Project an impressive 60" diagonal image from just 46cm from the screen. Stand alone or wall mounted the EX685UT eliminates shadows on the screen and allows you to present with ease.



*OPTIONAL ACCESSORY





PERFECT FOR TEACHING ✓

Maximise space in the classroom for teachers and students. The teacher can stand close to the interactive whiteboard without having the intense light from the projector shining directly into their eyes.

FUTURE PROOF TECHNOLOGY FOR THE CLASSROOM ✓

Engage and inspire your students with 3D lessons in Biology, Maths, Geography and many more.



ENERGY EFFICIENT = ENVIRONMENTALLY FRIENDLY = SAVE MONEY ✓

Running costs are reduced thanks to reduced power consumption and standby mode <0.5W. When the projector is no longer required it will automatically turn off, saving energy and prolonging the life of the lamp.

DETAILED PROJECTION ✓

Easy to read text and graphs thanks to the incredibly high native contrast ratios.

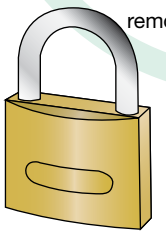


SECURE ✓

Kensington Lock, security bar and password protection help secure your projector and act as a theft deterrent.

Customised start-up screen helps identify who the projector belongs to.

Keypad lock prevents unauthorised adjustments and ensures the projector can only be controlled via the remote control or network.

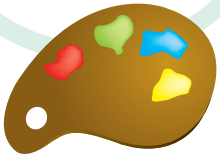


EASY TO CONTROL AND MONITOR ✓

Crestron RoomView® software provides a custom configurable interface to monitor, manage and control every projector in every room remotely from any computer.

BRILLIANT COLOURS THAT LAST ✓

Project stunning, vibrant and accurate colour images that won't decay overtime thanks to BrilliantColor™ and DLP® technology.



EX685UT

DISCOVER THE ADVANTAGES OF 3D PROJECTION

EDUCATION

Bring the classroom to life. Engage and inspire your students with lessons taught in 3D. Increase your students interest and help them to explore the world, travel through space, see inside the body and bring new ideas to life.



OFFICE

Grab your colleagues or customers attention by delivering a winning presentation. Modelling costs are eliminated as the product can be brought to life in a virtual projected 3D world.



DISPLAY

Wow audiences in museums, galleries and shops to give them a 3D experience they really will remember.



HOW DOES 3D WORK?

Using the inherent speed of DLP® technology, Optoma 3D-Ready projectors can output video and images at an astonishing rate of 120Hz, allowing you to show full screen, full colour, stereoscopic 3D.

The 3D effect is generated by splitting this signal into two standard video streams, one for each eye. Using DLP® Link™ technology, the 3D glasses synchronise with the image on screen to filter each stream to the correct eye. Your brain then combines the two streams to make them jump into life.



WHAT YOU NEED

1. Optoma EX685UT
2. Optoma DLP®-Link™ Glasses
3. Quad-buffered graphics card (installed in a PC) and 3D educational software

For more information please visit **www.optoma.co.uk/3deducation.aspx**

CARING FOR THE ENVIRONMENT

The EX685UT incorporates energy saving features to conserve power and extend the lamp life:

To achieve the maximum 3000hrs lamp life time the projector should be operating in ECO mode and the shut down timer enabled to automatically switch off the projector if it is accidentally left on when no longer required.

Optoma's low energy standby mode significantly reduces power consumption, enabling environmentally friendly power management and lower cost of ownership.It takes less than 10 seconds for the projector to power up and shutdown, saving both time and energy.

We know that improving our products is the best way to reduce our impact on the environment. That's why at Optoma, we design our products to have a long usable life, use fewer materials, ship with the minimum packaging and be free of all possible toxic substances. Naturally, energy efficiency and being recyclable are built in at the design stage. With each new product, we strive towards minimising our environmental impact. For full details of Optoma Project Green please visit our website.

CLEAR, FOCUSED IMAGES

Lessons in the classroom and presentations in the boardroom demand sharp, flawless images. DarkChip3™ technology from Texas Instruments produces a stunning 3000:1 contrast ratio for pin sharp graphics and crystal clear text. Crisper whites, ultra-rich blacks makes images come alive and text easier to read.

We are so confident that the EX685UT image colour quality will remain as good as the day you bought it that Optoma will guarantee it for five years.

BRIGHT, DETAILED & COLOURFUL PROJECTION

Grab your audience' attention with bright, vivid projected images thanks to the BrilliantColor™ technology incorporated within the EX685UT.

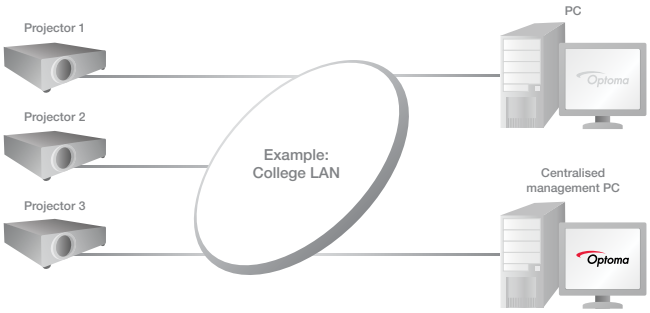
Once you've purchased an Optoma DLP® projector, we guarantee that the colours compared to other leading technologies will not fade for a minimum of 5 years.

Preset display modes allow you to achieve a perfect image on a variety of surfaces including screens and interactive whiteboards.

CRESTRON ROOMVIEW® - NETWORK CONTROL

RoomView® software provides a custom configurable interface to power on/off, monitor, manage and control up to 250 projectors at the same time from any computer.

- Schedule the projectors to power up/down saving time, money and extending the life of the lamp.
- Control and alter the projector settings using a simple web browser page including menu control.
- Send alerts for warning messages.
- Reduce maintenance time by automatically receiving emails for lamp replacements.



Download Crestron RoomView® Express software from:
www.crestron.com/getroomview

RS232 CONTROL

The extensive RS232 command set makes it simple and easy to control the EX685UT with any control system.

AMX Compatibility – Dynamic Discovery
Protocol is incorporated into the EX685UT. This feature allows for easy installation with AMX control systems.

EX685UT

CONNECT WITH EASE

The EX685UT easily connects to multiple devices such as computers, laptops, DVD players and games consoles.



TRUE HDMI

Project crystal clear images using HDMI v1.3 input. Hassle-free projection from a widescreen computer/HD source with a single HDMI cable – no need for separate audio cables.

EASY LAMP REPLACEMENT

Direct and easy access to the lamp whist the projector is in situ.

AUDIO POWER

Use a microphone and the powerful built-in 10W speakers to capture your audience attention from anywhere within your classroom or meeting room.

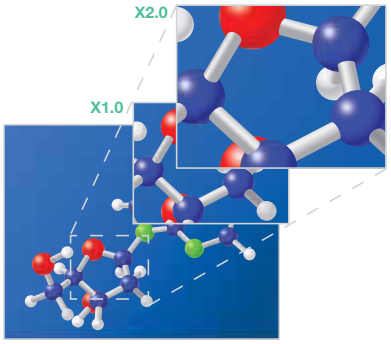
Two audio inputs from individual computer and video devices enable the EX685UT to function as an audio switcher and volume controller. The need for complicated and costly additional audio hardware and cabling is eliminated.

When the projector is in standby mode, external speakers can still be used by connection to the audio out connector. [only compatible with stereo mini-jack]



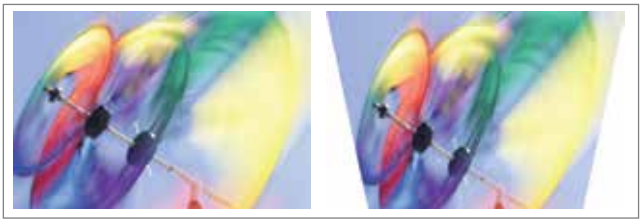
ENLARGE YOUR IMAGES

Use the digital zoom feature to explain the projected image in more detail.



PERFECT PROJECTION

Quickly adjust misaligned images with vertical keystone correction.



INSTALLATION

Integrated cable management design ensures security and protection. Fitted with the customised OPCUWM900 wall mount the cables are concealed to ensure a neat, tamper proof installation.



PROJECTION TILTING

For tabletop use as well as wall and floor projection.



EX685UT SPECIFICATIONS

Native Resolution	XGA 1024 x 768
Display Technology	Single 0.55" XGA DC3 DMD chip DLP® Technology by Texas Instruments
Brightness - BRIGHT mode[1]	3000 ANSI Lumens
Contrast	3000:1
Noise Level	30dB (ECO mode)
Lamp Life[2]	3000 (ECO mode)
Projections Lens	F Number 2.71 Focus Length 4.423mm Focus / Zoom Type Manual Focus / 2.0x Digital Zoom Throw Ratio 0.3777:1 (Projection Distance: Image Width)
Projection Distance	0.5 - 0.8m
Image Size	1.53 – 2.55m (60.18" – 100.25") Diagonal 4:3
Offset	128.5% ±5%
Weight / Dimensions (W x D x H)	7.6 kg / 426.5 x 407 x 210mm (inc feet)
Remote Control	Full function remote with direct source selecting
INPUTS	HDMI (HDCP) - audio supported 2 x 15 Pin D-Sub VGA S-Video 4 Pin Mini Din Composite RCA 3.5mm Audio Mini Jack - Audio computer input 2 x Stereo RCA - Audio video input USB (service) Microphone
CONTROL	RS232 - 3 Pin Mini DIN RJ45 [Operation during standby mode - ECO standby must be set to off]
OUTPUT	3.5mm Audio Mini Jack 15 Pin D-Sub VGA [Supported through VGA 1 only. Operation during standby mode - ECO standby must be set to off] +12v Trigger
Audio	10W Speaker
Aspect Ratio	4:3 Native, 16:9/16:10 Compatible
Keystone Correction	± 40° Vertical
On Screen Display	19 Languages: English, German, French, Italian, Spanish, Portuguese, Polish, Dutch, Russian, Finnish, Swedish, Greek, Norwegian/Danish, Hungarian, Czech, Turkish, Farsi, Arabic & Romanian
Compatible Resolutions	UXGA, SXGA, WXGA, HD, XGA, SVGA
Video Compatibility	PAL SECAM 576i/p, NTSC 480i/p, HD 720p/1080i/1080p
Uniformity	85%
Displayable Colours	1.07 Billion
Horizontal Scan Rate	15 - 91kHz
Vertical Scan Rate	24 - 85Hz (120Hz for 3D)
Power Supply	100 - 240V, 50 - 60Hz
Power Consumption	365W BRIGHT mode < 0.5W Standby mode 325W ECO mode < 0.5W Standby mode
Operating Conditions	Operating: 5 - 40°C, 85% Humidity (Max), 3000m Altitude (Max)
Security	Security Bar, Kensington™ Lock Port, Password Protection
Standard Accessories	Lens Cover, AC Power Cord, VGA Cable, Full Function Remote, Batteries x 2, Quick Start Guide, CD User Manual, Warranty Card, WEEE Card
RoHS	Compliant
Lamp Warranty	1 year or 2000 hours - whichever comes sooner
Warranty	Warranty may vary by country. Please see www.optomaeurope.com or ask your local supplier for details
Colour Guarantee[3]	5 Years
3D Support	120Hz frame sequential 3D for resolutions up to 720p. 60Hz field sequential 3D for resolutions up to 480i
3D Viewing	Requires Optoma DLP® Link™ active shutter glasses – sold separately
3D Compatibility	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.

Optoma Accessories	
Projector Wall Mount - Part number: OPCUWM900	
	Wall mount for the EX685UT Telescopic mount with height adjustment plate for versatile installation. Maximum projector image of 100" diagonal with the EX685UT.
Lamp - Part number: SP.8JR03GC01	
	Optoma genuine lamp modules are designed and tested to work specifically with your Optoma projector to ensure quality, good performance and longevity.

EASY TO USE REMOTE CONTROL

EX685UT Remote Control

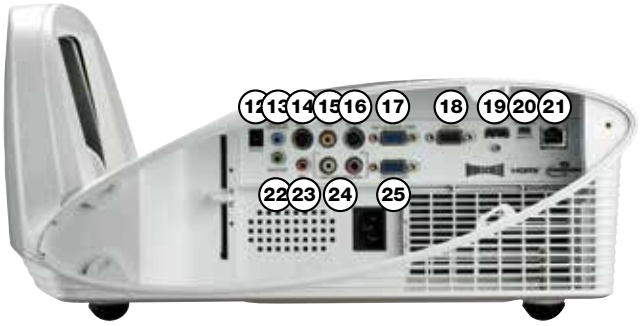
1 Power
2 No function
3 No function
4 Enter/Help
5 Vertical Keystone Adjustment
6 Volume Control
7 Brightness Adjustment
8 3D Control
9 Direct Input Source Selection
10 Freeze Control
11 AV Mute



EX685UT Connections

12 +12v Trigger
13 Audio In (VGA 1 & 2)
14 RS232
15 Composite Video
16 S-Video
17 VGA 1- Scart & Component
18 VGA Out
19 HDMI (audio supported)
20 USB (service)
21 RJ45
22 Audio Out
23 Microphone
24 Audio In (S-Video & Composite)
25 VGA 2- Component

Exceptional Connectivity / Multiple Terminals



Projection Distance 0.5 - 0.8m XGA (4:3 Aspect Ratio)						
Distance from screen to projector (m)	Projection Distance from mirror (m)	Horizontal Image Size (m)	Vertical Image Size (m)	Diagonal Image Size (m)	Diagonal Image Size (inch)	Image Offset (m)
0.119	0.461	1.223	0.917	1.529	60.18	0.261
0.157	0.499	1.324	0.993	1.655	65.14	0.283
0.196	0.538	1.427	1.070	1.784	70.23	0.305
0.234	0.576	1.528	1.146	1.910	75.19	0.327
0.250	0.592	1.570	1.178	1.963	77.28	0.336
0.273	0.615	1.631	1.223	2.039	80.28	0.349
0.310	0.652	1.729	1.297	2.162	85.11	0.370
0.426	0.768	2.037	1.528	2.546	100.25	0.435

For guide purposes only

EX685UT is capable of 16:9/16:10 aspect ratio projection. When projecting a 16:9/16:10 image the image sizes, screen height and offset information will differ from the above.

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www.optoma.co.uk

[1]Brightness and lamp 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. [2]Typical lamp life achieved through testing. Will vary according to operational use and environmental conditions. [3]Optoma guarantees that in normal use, Optoma DLP® colour quality will be indistinguishable from when new. Exclusions: (a) Guarantee is voided if the projector is subject to damage through misuse. (b) Guarantee may be void in industrial or commercial entertainment environments where dust or smoke is excessive (c) Guarantee will not apply if lamp brightness is below 50% due to wear or if the projector is not working due to other faults. (d) Over time worn lamps within all projector types will show a slight colour variance. Copyright © 2012, Optoma Europe Ltd. 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. Crestron®, the Crestron and RoomView® logo are registered trademarks of Crestron Electronics, Inc. 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 of products are for representation purposes only. Whilst every care is taken to provide accurate images of our products, actual products may differ slightly. Some product images may have been digitally altered by us to add an Optoma logo to the front panel. Optoma reserves the right to amend or alter actual product or product images without notice. Some images may be simulated.