**Q1: What is a 3D-compatible projector?**
A 3D-compatible projector outputs video and images at a rate fast enough (120Hz) to support full-screen, full-color stereoscopic 3D. However, these projectors can only display 3D images when content designed to be displayed in 3D is delivered to the projector from a PC with software that can generate a 3D image and with a graphics card that supports 3D display. In addition, Optoma projectors be used with 3D TV broadcast systems or 3D Blu-ray players with the addition of Optoma’s 3D-XL converter box, which is sold separately.

**Q2: How is the 3D effect created?**
The 3D effect is generated by splitting the output signal into two standard video streams, one for each eye. Using Texas Instrument’s DLP® Link™ technology, 3D glasses synchronize with the image on screen to filter each stream to the correct eye. The viewer’s brain then combines the two streams into a single entity and brings them to life.

**Q3: What is required to view 3D images?**
In order to view 3D images, you must have a system that includes a 3D-compatible Optoma projector, the 3D-XL 3D projector adapter, Active lens 3D glasses (DLP® Link™ glasses or NVIDIA 3D glasses / IR emitter) for each viewer and 3D content (i.e. DVDs, games, software or satellite/cable broadcast). In addition, you will need the hardware required to play your content (gaming system or 3D DVD player).

**Q4: Are content choices limited?**
Although not ubiquitous, the proliferation of 3D content is quickly becoming a reality. Today, content choices include:
- **Computer-based software:** Today, many 3D computer gaming titles are available and a more limited number of companies are developing software to enhance the learning experience. Content providers include EON Reality, Stereoscopic Media Play, Classroom3, Designmate and Neotek.
- **Special applications – computer programs and content has been developed enabling 3D training for corporate, medical and government applications.**
- **Digital photos:** Stereoscopic software transforms digital photos into 3D for display from a compatible computer. A compatible graphics card, drivers and active lens 3D glasses are required to view images.
- **DVDs:** A limited number of 3D DVD titles created in HQFS (frame sequential / stereoscopic) format are currently available. In addition, Blu-ray titles began being introduced in 2010.
- **Satellite and cable television content:** Increasingly, television service providers are making 3D content available. Comcast has announced a cable channel, for example, and DirectTV has launched a satellite-based channel.

**Q5: What format must 3D content be in?**
Content must be supplied in a frame-sequential (stereoscopic) format with a refresh rate of 120Hz, for resolutions of 800x600, 1024x768 or 1280x720. Select models include 3D support for SDTV signals (480i @60Hz), for viewing “high quality” field
sequential” (HQFS) DVD titles> (The projector will up convert these to 120Hz in real-time to enhance your viewing experience.)

**Q6: What are the minimum computer requirements to display 3D content?**

Minimum requirements include:

- **Operating system:** Microsoft® Windows® Vista™ (32 bit), XP (32 bit) SP2 or equivalent.
- **CPU:** Intel® Core™2, Duo and higher required.
- **Hardware:** 1GB memory or higher (2GB recommended), 1GB hard disk space.
- **Graphics card:** NVIDIA GeForce® - GPU required: GeForce GT 240 or equivalent; GeForce 9800 GT or equivalent; GeForce 8800 GTS or equivalent. NVIDIA driver version R191.00 or equivalent.
- **Other Software:** DirectX® 9.0c or equivalent; Windows Media Player 11 or equivalent.

For content rendered in OpenGL format (e.g. EON Reality, Stereoscopic Player), the PC must have a quad buffered graphics card to work with a 3D projector. If the content is natively frame sequential (HQFS DVD), no special hardware is required. These are only SDTV quality.

**Q7: Does the projector turn all content into 3D?**

No. To use the 3D function of the projector, you need content that has been created in 3D. The computer program must also include drivers to display 3D content.

**Q8: Will an Optoma 3D compatible projector work as a normal projector?**

Yes. All Optoma 3D compatible models are designed to function as normal (2D) projectors.

**Q9: Can I use the glasses from the movie theater or the red/blue type?**

No. Optoma uses “active shutter-glass” technology to produce 3D images. The glasses from the movie theaters use “passive, polarized technology”. The red/blue glasses use a technology called “anaglyph.” Neither of these technologies can replace active shutter glasses.

**Q10: Will DLP Link glasses work over my normal glasses?**

Yes. We have designed Optoma 3D glasses so that they can be worn over the top of prescription glasses. If images do not appear correctly, the 3D Sync Invert setting may need to be switched to the “on” setting.

**Q9: How long do the batteries last in the glasses and can they be recharged?**

Our first generation ZD101 glasses will last for approximately 70 hours before the batteries need to be replaced. In the current design, the batteries are not rechargeable.
Q10: Will wearing 3D glasses give me a headache? How can I mitigate the problem?
Some people who are sensitive to motion and the 3D effect have reported experiencing headaches. To mitigate the problem, Optoma recommends taking a five minute break for every hour of 3D viewing.

Q11: What projector settings do I need to changed to view 3D content from a 3D source?
In the Display section of the projector menu system, set the 3D setting to “on”.