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Expanding Your Projection Capability

How third-party replacement projector lenses increase your projection versatility

by Joseph Pintavalle

Third-party replacement projection lenses replace the existing prime lens on an LCD or DLP video projector and allow you to use the projector in a variety of new applications. You can achieve larger images from the same projection distance or similar sized images from a shorter projection distance. Replacement lenses expand your projector's capabilities, provide flexibility in locale, and maintain high quality images — all helping you optimize your projection system.

When is having a projector that can accept replaceable lenses important?

Having a projector that accepts replaceable lenses is important when you need to be more flexible in the placement of the projector. Perhaps you need to place a screen in a more strategic location or you want to hide the projector in the back of the sanctuary. When your application goes beyond the capabilities of the projector's native or standard lens and it cannot be conquered with a simple "add-on" type lens, the addition of the correct replacement lens is your solution.

For example, low-cost, high-brightness projectors are targeted for use in mid-sized rooms and typically come equipped with a 2:1 throw-ratio lens. These projectors do not ac-

cept replaceable lenses and therefore limit projection capability. If a special event required the need to fill an eight-foot-wide screen at 40 feet, the low-cost projector would not do the job. To achieve this you would need to move to a replacement lens projector that offers different throw ratio lenses (in this case a 5:1 throw ratio lens).

Oftentimes, one projector must be used for a multitude of applications, such as switching from an auditorium to a meeting room. Having a projector equipped with a quick-change or bayonet mounting system allows you to quickly change lenses as needed without any special tools.

What are the advantages/ disadvantages of third-party vs. OEM lenses?

The main advantages of third-party replacement lenses are price and selection. Third-party lenses are priced substantially less than OEM lenses, making it possible to purchase a lens for each distinct application you may have at considerable savings. Because of their motorized zoom and focus features, OEM replacement lenses are often priced significantly higher.

It is important to remember that just because you have a projector model from a certain manufacturer, the additional lens options offered by that manufacturer may not be the best overall solution for you. If your projector is in a fixed location 50 feet high in the back of the church, and you have no need to remote zoom or focus, the OEM motorized replacement lens option provides you with more than what you actually require. Third-party suppliers can provide you with a far broader selection of lenses to choose from which allows you to find a cost-effective solution to your projection requirements.

Third-party replacement lenses are designed to offer high quality images similar to the OEM replacement lens. Often there is no discernable difference between the projection quality provided by the OEM lens and the third-party lens; however a projector's performance will always be at its optimum when using the existing prime lens.

Are there consequences to using third-party lenses? Might it affect operation of the projector or impact the warranty?

Third-party lenses are optical/mechanical devices and have no electrical connections, and therefore they do not affect the practical operation of the projector. OEM replacement lens projectors are designed for easy installation of replacement lenses. Third-party mounting hardware does not interfere with the electronic components or adjustable functions of the projector. When installing a third-party replacement lens correctly, there is no impact on the warranty of the projector.

A key point to remember is that third-party lenses are not built to be in competition with OEM lenses. An OEM manufacturer might offer three replacement lenses for a particular projector model — however, these lenses might not meet the customer's requirements. Third-party replacement lenses provide options above and beyond what the OEM can offer and, in turn, help to create a customized projection solution for the customer. In turn, third-party lenses actually provide more opportunities for the manufacturer to sell its projectors.

Joseph Pintavalle has over 27 years experience selling superior-quality optical lenses and customized optical solutions for LCD and DLP projection. For over 17 years Joe worked for Buhl Optical, a Pittsburgh-based optics company, and joined Navitar, a manufacturer of optical lenses for LCD and DLP projectors, in 1997 when Navitar acquired the Buhl name and organization. Currently Joe serves as the audio visual product manager for Navitar (www.navitar.com).

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