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# Bell And Howell 8mm Projectors

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**THE HISTORICAL SIGNIFICANCE**  
Bell And Howell 8mm Projectors  
by Page & Hatfield

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## THE ENDURING LEGACY OF BELL AND HOWELL 8MM PROJECTORS

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In an age dominated by streaming services and digital cinema, there is something profoundly evocative about the whir of a film reel and the warm, flickering light that dances across a living room wall. For millions of families between the 1950s and the 1970s, that magic was delivered by a single, trusted name: **Bell and Howell**. These machines were more than just gadgets; they were the gatekeepers of memory, the storytellers of a generation. To understand the impact of home movies is to understand the role of the Bell And Howell 8mm projector, a device that brought the art of cinema into the hands of the everyday person.

The name Bell & Howell is synonymous with precision and durability. Founded in 1907, the company built its reputation on professional-grade motion picture equipment for Hollywood studios. When they turned their attention to the consumer market, they brought that same engineering rigor to their 8mm projectors. The result was a line of machines that were robust, reliable, and remarkably easy to use. Decades later, these projectors are still sought after by collectors, film enthusiasts, and nostalgic families looking to revive the ghosts of holidays past.

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## OF THE 8MM FORMAT

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Before we dive into the specifics of the projectors themselves, it is important to appreciate the context in which they existed. The 8mm film format was introduced by Eastman Kodak in 1932 as a more affordable alternative to the bulky 16mm film used by professionals. It was a breakthrough, allowing amateurs to shoot their own movies without breaking the bank. However, it was after World War II, with the rise of suburban prosperity and the baby boom, that home movies truly exploded in popularity.

Bell & Howell capitalized on this cultural shift perfectly. They understood that the average family wanted a machine that was simple enough for a parent to operate but professional enough to treat precious memories with respect. While other manufacturers focused on cost-cutting, Bell & Howell maintained a commitment to quality. Their projectors featured all-metal construction, precision-ground lenses, and finely machined gears. This durability is why so many of these machines still function flawlessly today.

The 8mm format evolved over time, and Bell & Howell adapted. Initially, the standard was Regular 8 (or Double 8), which required running the film through the camera twice to expose both halves. Later, Super 8 arrived in 1965, with a larger image area and a convenient drop-in cartridge. Bell & Howell embraced both formats, producing

dedicated machines for each, as well as dual-format projectors that could handle both Regular 8 and Super 8. This flexibility ensured that families could continue to enjoy their entire library of films without needing multiple machines.

## Bell & Howell's Engineering Philosophy

What truly set Bell And Howell 8mm projectors apart from competitors like Keystone or Revere was the company's obsession with optical precision. Their lenses, often branded as **Bell & Howell Super 8** or **Bell & Howell Filmosound**, were renowned for their sharpness and contrast. Even today, a well-maintained Bell & Howell projector can produce an image that rivals entry-level digital projectors in terms of warmth and color fidelity.

The threading mechanism on many of their models was a marvel of user-centric design. While some early projectors required a degree in mechanical engineering to thread the film correctly, Bell & Howell pioneered "automatic" or "channel" threading systems. The user simply inserted the film leader into a slot, and the projector would grab it, loop it through the gate, and spool it onto the take-up reel automatically. This innovation removed a major barrier for casual users, making movie night a joy rather than a chore.

Another hallmark was their sound capability. The Bell & Howell Filmosound line, introduced in the 1950s, brought magnetic sound recording and playback to the home market. This allowed

families to record narration, music, or even live audio onto their film after it had been developed. For the time, this was nothing short of revolutionary. The audio quality, while not studio-grade, was remarkably clear for consumer magnetic stripe technology, and the amplifiers built into these projectors could easily fill a large living room with sound.

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### ICONIC MODELS OF BELL AND HOWELL 8MM PROJECTORS

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Over the decades, Bell & Howell produced dozens of models, each with its own character and capabilities. Some have become legendary among collectors and film enthusiasts. Understanding the differences can help anyone looking to purchase a vintage machine or simply appreciate the technology of the past.

## The Bell & Howell 403 and 405 Series

These are often considered the "gold standard" of silent 8mm projectors from the late 1950s and early 1960s. The 403 was a manual-thread model, while the 405 introduced automatic threading. Both featured a robust metal body, a powerful lamp, and a gear-driven mechanism that was virtually silent in operation. The image stability on these machines is exceptional, with virtually no flicker or jitter, a testament to the precision of the Geneva drive mechanism inside. If you are looking for a machine to project your grandfather's old silent home movies, this is a fantastic starting point.

## HOW TO USE A BELL AND

# The Bell & Howell Filmosound 656Q

This is a beloved model for sound film enthusiasts. The 656Q was a dual-format projector capable of handling both Regular 8 and Super 8. It featured a quartz-halogen lamp for brighter, cooler operation, and a solid-state amplifier that delivered warm, clear audio. The automatic threading system on this model is particularly forgiving, making it a great choice for beginners working with fragile old film stock. The 656Q also included a variable speed control, allowing users to slightly slow down or speed up their films for dramatic effect or to correct for camera speed errors.

## The Bell & Howell 1733Z

This model represents the apex of Bell & Howell's consumer projector engineering. The 1733Z was a Super 8-only machine with a zoom lens, automatic threading, and a highly efficient cooling system. It also featured a "still" button, allowing the user to freeze a single frame on screen for extended examination. While this could theoretically damage the film if held too long, it was a popular feature for scrutinizing details in a scene. The 1733Z is also known for its exceptionally quiet motor, allowing the audience to focus on the film's content rather than the machine's noise.

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## HOWELL 8MM PROJECTOR TODAY

If you have recently inherited one of these machines or found one at a flea market, you are in for a treat. However, there are a few important steps to take before you plug it in and hit the "on" switch. Remember, these machines are often decades old, and their electrical components may have degraded over time.

1. **Inspect the power cord.** The original rubber insulation can become brittle and crack, exposing wires. If the cord is damaged, replace it or have it professionally repaired before testing the projector. It is also wise to check the plug for any signs of melting or corrosion.
2. **Check the belts.** Many Bell & Howell projectors use a rubber belt to drive the take-up reel and sometimes the fan. Over time, these belts can become stretched, hard, or simply snap. Replacing them is usually straightforward and inexpensive, and it can save you a lot of frustration.
3. **Clean the film gate.** The gate is the metal aperture where the film passes in front of the lamp. Dust, lint, and old lubricant can accumulate here, scratching your precious film. Use a soft cloth and isopropyl alcohol to gently clean the gate. Be careful not to bend the delicate pressure plate.
4. **Lubricate sparingly.** Many old projectors need a small amount of light machine oil on specific bearings. However, using too much oil will attract dust and can cause the mechanism to gum up.

Do your research on your specific model before applying any lubricant.

5. **Test with a sacrificial film.**

Before running your great-grandmother's wedding film, use a less valuable reel or a film leader to test the projector's threading, transport, and image quality. This will help you identify any issues before they can damage irreplaceable footage.

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## MAINTENANCE TIPS FOR LONG-TERM PRESERVATION

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Owning a Bell And Howell 8mm projector is not just about watching films; it is about preserving a piece of history. To keep your machine running for another fifty years, consistent care is essential.

- **Store in a dry, climate-controlled environment.**

Humidity is the enemy of metal and leather. Avoid basements and attics where temperature and moisture fluctuate wildly. A consistent environment will prevent rust and prevent the deterioration of lubrication.

- **Run the projector periodically.**

A machine that sits idle for years is more likely to develop problems than one that is used occasionally. Running a reel of film through the projector every few months keeps the gears moving, the lubricants distributed, and the capacitors healthy.

- **Keep the lens covered.** When not in use, always replace the lens cap or cover the projector with a clean cloth. Dust on the lens will soften the image and reduce contrast. Cleaning a lens improperly can also scratch the

delicate coating.

- **Replace the lamp carefully.** The lamps (bulbs) in these projectors are becoming rare. When a lamp burns out, handle the replacement with gloves. The oil from your fingers can cause a hot spot on the quartz envelope and dramatically shorten its lifespan.

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## THE CULTURAL RESURRECTION OF HOME MOVIE PROJECTION

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There has been a quiet renaissance in analog cinema over the past decade. While 8mm film is no longer as accessible as it once was, a dedicated community of enthusiasts continues to shoot, process, and project their own movies. This resurgence has increased interest in the projectors themselves. Bell & Howell, with their reputation for quality, are among the most sought-after brands in this community.

The experience of projecting film is fundamentally different from watching a digital transfer. The slight flicker, the warmth of the lamp, the occasional dust speck, and the sound of the mechanism create a visceral, tangible connection to the medium. It is an event, not just passive viewing. For families, gathering around a Bell & Howell projector to watch grandfather's vacation footage from 1962 is a ritual that bridges generations. It brings the past to life in a way that a digital file on a hard drive simply cannot replicate.

Furthermore, many archivists and historians prefer to screen original 8mm prints on vintage projectors to understand the intended visual experience. The color temperature of the original projectors' lamps, the slight halation of the lenses, and even the mechanical imperfections all contribute

to the "look" of the era. Bell & Howell equipment is often the tool of choice for these purists.

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## WHERE TO FIND FILM AND ACCESSORIES

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While Bell And Howell 8mm projectors are relatively easy to find on eBay, at estate sales, or through online marketplaces, the supporting ecosystem can be a little more challenging.

- **Film stock:** Kodak still manufactures Super 8 film cartridges, including color negative and black-and-white stocks. These are available from specialty photography retailers. Regular 8 (Double 8) film is harder to find but is still produced by small companies like Foma and is sold through online film communities.
- **Projector lamps:** Many common lamp types (like the EJV, FCS, or DNF) are still manufactured, but some specialty lamps are no longer in production. Online communities and specialty dealers often have stocks of NOS (New Old

Stock) lamps. It is wise to buy a spare lamp when you purchase your projector.

- **Reels and cans:** Original metal and plastic reels are common and inexpensive. Plastic reels are lighter and easier to store, but metal reels are more durable. Always store your film reels in a cool, dry place, away from magnetic fields and direct sunlight.
- **Splicing tape and cement:** If you need to repair a broken film, you will need either a splicer and cement (for acetate films) or a tape splicer (for polyester films). Bell & Howell made excellent splicers that are still widely available.

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## CONCLUSION

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The Bell And Howell 8mm projector is far more than a piece of obsolete technology. It is a time machine, a storyteller, and a monument to an era when home entertainment was a carefully curated ritual. These machines were built to last, and they have. With a little care and understanding, a Bell