

Les Paul

Collegiate Level

Inventor, Gold Record Performer

A detailed paper on Les Paul's inventions and innovations is available under Education, Collegiate at www.les-paul.com

Lester Polsfuss, who later became Les Paul, was born on June 9, 1915 in Waukesha, Wisconsin. He was the second child of Evelyn and George Polsfuss, descendants of German immigrants. After his parents were divorced when he was five years old, Lester lived with his mother and brother Ralph.

Even as a child Les was interested in music and engineering. His first invention was a harmonica holder that let him play his guitar and harmonica at the same time. Although harmonica holders were available, Les' design allowed him to flip his harmonica with his chin. As a teen, Les played his guitar all around Waukesha and the Milwaukee area.

While performing at a drive-in restaurant he experimented with amplifying his voice and harmonica by using parts from his mother's telephone and radio. Next, he amplified his acoustic guitar with parts from his father's phonograph. While in high school Les began to experiment with building a solid body electric guitar. First he filled his hollow body guitar, but the sound was awful. Next he stretched a guitar string along a 2-foot steel rail from a train track. His Rail guitar was primitive, but it produced the sustain he wanted and it was the start of his guitar evolution.

In order to analyze his performances he built a recording lathe for his mother to record his radio performances.

Radio was new and featured only live performances. As a teen, Les played on several Wisconsin radio stations. At 17, he moved to St. Louis to perform on a new station. A few years later, he was in Chicago performing hillbilly music on the radio as Rhubarb Red during the day and learning jazz in the evening as Les Paul. He had a solid body guitar built, but it was far too heavy to be practical. He made his first professional recordings in Chicago on the Montgomery Ward label.



Les as Rhubarb Red



Les with The Log

After forming his first Trio, Les moved to New York where the group performed with the wildly popular Fred Waring. While on the show, Les transitioned from playing acoustic to electric guitar. He continued his experiments with the solid body electric guitar. This time he took a 4" x 4" piece of wood with an Epiphone neck and strung it like a guitar. He called it his Log. Although primitive in appearance, it produced the sound Les had been chasing. He showed his invention to Gibson and argued that solid body electric guitars were the future. They were not interested and it took Les almost 10 years to convince Gibson that he was right.

In 1943, Les moved to Hollywood. World War II was raging and Les soon was drafted into the Armed Forces Radio Service. While making recordings for the troops he learned more about recording techniques. Once out of the service, Les' Trio became regulars, playing popular music on NBC radio, where he connected with his idol, Bing Crosby. Les' Trio recorded the hit, "It's Been A Long, Long Time" with Bing and went on tour and recorded with the popular Andrew Sisters.

When NBC wanted to add a hillbilly show Les resurrected his act from his St. Louis and Chicago days. This time he wanted to add a female singer. A friend suggested Colleen Summers, who was singing backup for Gene Autry. It wasn't long before Colleen became "Mary Lou" and joined Les' Ozark Apple Knockers.

When Les built a recording studio in his Hollywood garage he attracted all the big name performers of the day. He had acquired a reputation for the making the best quality recordings. Les said he was determined to solve the sound problems the studios were having. Les was constantly experimenting, seeking the best way to record the wide variety of instruments played by those he recorded. Les relayed how this was a time of intense learning in both the engineering and music side.

Les' mother was his biggest fan. When she told him that she couldn't tell the difference between his electric guitar playing and that of others, he returned to his Hollywood recording studio, determined to create a unique sound. Relentless experiments led to Les Paul's New Sound, which introduced his multiple innovative recording techniques including reverb, phase shifting, echo and sound on sound.



Les Paul & Mary Ford

In 1948, when Les' New Sound was being released, he and Mary were in a horrific car accident. Mary had minor injuries, but Les' multiple injuries included a shattered right elbow. After refusing to allow a doctor to amputate his right arm, Les endured multiple surgeries and had his arm set so that he could play his guitar.

The following year, Les and Mary were married. Over the next several years their recordings skyrocketed to the top of the music charts. The two drove from one concert to the next, crossing the country. They also performed in Europe, South America and Alaska. At the same time, they were recording their radio shows and sending tapes back to Hollywood to be aired.

Les had been recording sound on sound using acetates. When Bing Crosby gave Les one of the first U.S. tape recorders, Les added a second record head to the machine, thus inventing the first tape sound on sound machine. Later he took his invention a step further by stacking eight tape recorders and creating the first 8-track tape recorder.

In 1952 the Gibson Les Paul solid body electric guitar made its debut. About this time, Listerine asked Les and Mary to create a TV show. Television was new and Les couldn't resist. Listerine wanted the couple to move closer to its New York headquarters. Les and Mary sold their Hollywood home and moved to a mountainside home in New Jersey where they filmed what may have been America's first reality TV show. "Les Paul and Mary Ford at Home" ran for 5 minutes, 5 times a day for 5 days a week. The show combined a short script and a song or two by the duo. Some of the 190 shows can be seen on the internet.

The introduction of Rock music in the early 1960s stifled many previously popular acts, including Les Paul and Mary Ford. The couple divorced in 1964. Les retired from performing to focus on inventing and helping younger performers. In 1975, Chet Atkins convinced Les to record what would become the Grammy-winning album, "Chester and Lester."

In 1984 Les started performing every Monday at a jazz club in Manhattan and continued performing to within a couple of months of his passing on August 12, 2009.

Les received many awards, but he is the only person to be inducted into both the Rock and Roll Hall of Fame and the National Inventors Hall of Fame. Some of his awards include the Country Music Hall of Fame, Hollywood Walk of Fame Star, Audio Engineering Society, six Grammy Awards, an Emmy Lifetime Achievement Award, Songwriters Hall of Fame and the National Medal of Arts from U.S. President George W. Bush.



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