

From workhorse to icon

The 704 Jerrold Field Strength Meter

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The history of the Jerrold 704 Field Strength Meter spans practically the entire life of the cable television industry. Conceived in 1951, shortly after the original seeds of the industry were planted in 1948-1950 in Oregon, Arkansas and Pennsylvania, the 704 became the workhorse of the industry and remained so until the 1970s. Manufacturing of the 704 started in 1953 and continued until 1967 or so, when it was phased out in favor of the Jerrold 727 meter. During the manufacturing run of the 704/A/B meters, more than 8,000 were produced.

Today, the 704 is regarded as an icon, representing the engineers and technicians upon whose technical accomplishments today's broadband business was built. The 704 model name survives in the name of the Loyol Order of the 704, an industry group of engineers with long memories... and tall stories.

The people behind the 704

In 1950, Milton Jerrold Shapp's company Jerrold Electronics Corp., which had been supplying signal boosters for TV showrooms and apartment buildings, began to supply modified signal boosters to be used

in cascaded cable systems. Shapp instituted a policy of having Jerrold engineers design systems and install the equipment. The critical need for accurate measurement of signal strength would have been driven home to the Jerrold engineers responsible for field operations. Shapp had assembled an

Ken Simons

Starting in 1930, Ken Simons worked for a number of years for RCA, with a stint as station engineer for WCAU. Around 1950, Simons had been talked into going from his home, in the Philadelphia suburbs, to Buffalo, N.Y., to work for Colonial Radio (Sylvania). He worked there in advanced development, and one of his assignments was evaluating tuners. Among other tuners that he checked was the Dumont Inductuner, which used a Mallory design. Upon his return to Philadelphia a year later, he started working for Shapp as a consulting engineer in his laboratory near his home in Bryn Athyn, Pa. One of his first assignments was to address the need for a piece of equipment with which to make reliable measurements of signal levels.

Simons was certain that, in the long run, cable was not going to be satisfied with just the two VHF bands—low band and high band. It was almost inevitable the mid-band would show up, although it was pretty well in the future. Any kind of a switched tuner was out of the question. He determined that the Mallory Inductuner was



The 704B Jerrold Field Strength Meter.

outstanding engineering team for Jerrold. The technical staff covered the whole gamut from original R&D, to product design for quantity production, to field operations.

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