

How it began:

27NOV2014RAG

Forty years ago the electronic world was a different place...
Things that are easy today were tough then... the MultiLimiter tried some new designs
It took more than a year to get to market, but it was worth the effort, and cost!

November 1974

I was a consultant with several Clients, including the R.H.F. Space Theater

Jack was President of Pacific Recorders and Engineering
Mainly doing High End A/V sales, repair, and Installation, and developing a Product Line of his own
I had assisted in getting an earlier design of the "DigiTimer" working in a high RF environment
(KCBQ)

Jack Williams posed the problem to me of build a better Broadcast Limiter
To have a chance in the marketplace we needed to develop a Better 'RMS' Limiter...

At the time Linear Gain Control Elements were extremely expensive
(Four Quadrant Analog Multipliers)
So most Gain Control Designs used Feedback Gain reduction... utilizing non-linear elements

Light Determined Resistors, LDR, Photo Resistors, had been around for more than a Century
Previously these had been coupled with Incandescent lamp,
and Neon Lamps to form a Control Element

It seemed natural to try Coupling a Light Emitting Diode, LED, to an LDR
I was so excited to get started, I built one!

Very early in the Testing it was clear, the LED-LDR combination had an almost Linear Response
The design quickly led to a Feed-Forward (Open-Loop) Gain Control Element

By the end of 1974 we knew we had the Potential of doing a Superior Design

"The Race was on"

Jack committed the funds, and I committed the time to show a new Product at the
April 3, 1975 National Association of Broadcasters Convention in Las Vegas!!!
A "complete" design and something to exhibit in less than 3 months!