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classic gear

Strand Electronic Control - the 'Woody' | by Rob Halliday . . .



It's remarkable to look back and see how much time, trouble and expense

has been put in over the years to fading lights up and down. The mechanical and electro-mechanical systems are particularly amazing to modern eyes, but remarkably, this was how you dimmed theatre lights in the UK until about 1949. More remarkably still, it was how you dimmed theatre lights for a while after 1955. But for the six years in between, Strand Electric offered a product that worked differently, entirely electronically. It was a flawed product, but one that certainly gave a glimpse of the future we enjoy to this day.

Called 'Strand Remote Control - Electronic Type' in the brochures, 'the Electronic' more broadly, the system was known colloquially as 'the Woody' after its creator, James Templeton Wood. A Royal Navy Volunteer Reserve Electrical Engineer serving on radar duties during World War II, Wood then joined Strand as the assistant manager of the company's northern branch in Manchester, working with Percy Cory.

At about the same time, Strand's theatre sales director L. G. Applebee had undertaken a lecture tour across the USA, on the way being introduced to a new electronic control system based on thyatron valves developed by George Izenour at Yale. It represented a clear threat to Strand's own Light Console, so in 1947 Strand decided to explore a similar system. Fred Bentham, their chief engineer, continued to champion electro-mechanical dimming; he was also in a sanatorium recovering from tuberculosis. Wood, 200 miles north, was the only Strand engineer with electronics experience. So began what we might now call a stealth project . . .

Wood approached the problem differently to Izenour, perhaps to avoid patent infringement. Probably familiar with thyatrons from their use in wartime radar,



he used a three valve system, each single channel tapping power from all three phases of the electricity supply to create a pulsed, positive polarity DC supply. A single channel prototype was made, followed quickly by a six channel prototype and a patent application. Strand's mechanical designer, Morgan McLeod, designed the rack to hold the thyatrons and a new 1" pitch fader to allow a compact design for the twin fader banks for two preset operation that the new

system would allow.

The first sale was in 1949, to the new National Theatre in Reykjavik, Iceland; the racks and desk wired up on-site! Further sales quickly followed, of systems in different sizes up to a maximum of 144 ways: 30 installations in six years, including London's New (now Noël Coward) Theatre and for the BBC's Riverside Studios, plus more in the US in a version licensed to Kliegl.

The system offered many advantages over earlier Strand systems, particularly the ability to preset and accurately recall states. But it was also troublesome. The thyatrons needed careful management, narrow tubes in later racks directing cold air to just the right spot of each valve to manage the condensation of the mercury they contained. If one thyatron failed you got a 'sticker' - a channel that wouldn't go off until you pulled that channel's three valves. Plus, unbeknown to Strand early on, the Woodys were creating unpleasant harmonics on the mains and dramatically - probably

dangerously - overloading the supply neutral.

In 1955, Strand pulled the Electronic and returned to motorised resistance and transformer dimmers. It would be another five years before the thyristor brought electronic dimming to the theatre once more - this time more permanently. ☒

▶ [//plasa.me/woody](https://plasa.me/woody)

Rob has been working in and writing about lighting for more than 25 years, on shows around the world. He wonders if this makes him a classic... or just old!



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