Digital Dimmers have been around for some time, but like many new technology products, they have been in the domain of the high-specification requirements. Strand has redressed the balance with its new 220/240V dimmer rack.

## LD90 - DIGITAL DIMMING FOR ALL



he LD90 digital dimmer rack was launched simultaneously at SIEL in Paris and at London's European Lightshow in February 1993. In the few months since its public introduction, LD90 has been installed in venues in the UK, France and Germany, and has been greeted with universal

Our objective was to produce a dimmer rack specifically for the small to medium size venue. It had offer the performance,

operational features and reliability of digital dimmers such as EC90, but at a price that was suited to limited capital budgets.

The compact wall-mounted or floor-standing LD90 cabinet is common to all variants. Although the maximum rating is twenty four 2.5kW dimmers, the heat management design of the cabinet requires no fans to maintain normal working temperatures.

As is usual with products of this nature, the design process includes extensive market

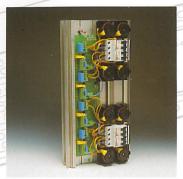
research. This involves talking to users and specifiers about the shortcomings of existing equipment, and aspirations for the future. Many of the facilities seen in the new LD90 were included to meet many of these personal views. Take for example the basic construction. Theatre consultants and system planners have been delighted to see the modular construction of LD90, comprising the cabinet with a processor unit, and up to three 'power blocks'.

The power block is formed by

The management decided that replacement of the ageing equipment was essential, and Ken took on the challenge of supplying, installing and commissioning a new lighting system comprising an MX48 memory desk and two LD90 dimmer racks in time for the

Within two days the system was ready to commission. Ken says, "Would any other dimmer have suited? Probably not, as the programming capabilities allowed

following Saturday performance.



An LD90 'power block' for 8 x 2.5kW dimmers comprising heatsink, power devices and protective circuit breakers.

a continuous heatsink with power circuits for either eight 2.5kW dimmers or four 5kW dimmers, plus the associated power terminations for load wiring and protective circuit breakers. Up to three of these blocks may be fitted per rack, and connected in any phase order, which means that dimmer ratings may be mixed in one rack, or that racks may be depopulated if required. Separately-installed RCDs are no longer necessary, as the LD90 has an RCD kit which simply clips in the middle of each power block if required.

Strand has also removed the complication of matching control desks to dimmers. LD90 accepts DMX 512, D54 and SMX multiplex standards, as well as individual analogue inputs with self-sensing polarity. Two 0V to +10V analogue outputs are also provided per rack for auxiliary equipment such as houselight dimmers. For venues where two multiplexed controls needed to operate simultaneously, LD90 has an optional second MUX input card as well to receive an additional DMX input.

LD90 also meets the growing demands of 'distributed dimming', where dimmers are conveniently located close to the load rather than the power supply. The compact and lightweight rack, can be mounted in any suitable position, in corridors or stage boxes if required.

us to retain the original circuit phasing by allowing patching between the two dimmer racks. Integral multiplex control also helped cut down installation time and meant that on Friday we were able to train the users on their new system."

The Principal Teacher of Drama at the associated secondary school who is now putting the system to good use, Yvonne Wheeler, was delighted with the speed of the installation.

## INSTALLATION NUMBER 1!



Yvonne Wheeler and the UK's first LD90 installation in Aboyne Community Centre.

rand's Main Distributor in Scotland, Northern Light, was quick to realise the potential of the new LD90 dimmer. Faced with the problem of 'the show must go on' when the control and dimmers from a defunct manufacturer had become unreliable at their Community Centre in Aboyne, the management called in Ken Christie from Northern Light.