All the tricks of the modern business computer have been studied and borrowed for the Viking[2] lightboard (1) to help the lighting designer work as rapidly and efficiently as possible. It features the Screen Editor, allowing you to change any function seen on the monitor display at any time. AVAB's Expert board (2) is built around a design concept emphasizing improvised lighting control and MIDI based communication with the musical environment.

Tous les petits avantages de l'ordinateur d'aujourd'hui ont été étudiés et empruntés pour le jeu d'orgue Viking[2] (1) pour aider l'éclairagiste à travailler aussi rapidement et efficacement que possible. Il incorpore le Screen Editor qui permet de modifier à tout moment toutes les fonctions sur l'écran. Le jeu d'orgue Expert d'AVAB (2) est construit autour d'un concept qui met en avantage les effets d'éclairage improvisés et la communication MIDI avec l'environnement musical.

Fur das Viking[2] lightboard (1) wurden alle Möglichkeiten die moderne business computer bieten in Betracht gezogen und übernommen, um dem lighting designer eine schnellere und effizientere Arbeit zu ermöglichen. Es hat einen Screen Editor, der es erlaubt jede Funkion zu jeder Zeit zu verändern, die auf dem monitor display gezeigt wird. Das Expert board (2) ist designet um grössere Lichtkontrolle und MIDI communication in Musicals zu ermöglichen.

warnings before permitting the operator to override earlier memories.

Within the discipline of these and other operating rules, Viking sets out to offer easy, flexible performance of rehearsed cues, and as many aids to composing and altering lighting looks as possible without complicating the basic operating technique.

All this was achieved in standard programming language on a standard commercial computer, so it has been possible to make continuing improvements over the eight years since Viking first appeared and simply supply customers with the new software on disk. In 1989, a major package of improvements was designed and offered as Viking[2]. The only change needed to older systems apart from the new software is new labels for the push buttons.

A new approach to menu layout makes choice of operating variables fast and easy.

The new software for the Viking[2] provides more improvements to assist rehearsal than performances. The Viking can now learn fade profiles, the effects systems has been improved, and the layout of the channels on the screen can be altered by the user to taste, perhaps to provide a geographic mimic. Dimmer levels can now be tracked through cue memories and, when necessary, altered totally or selectively.

Viking[2] offers the best that Swedish ingenuity can devise for controlling the large numbers of dimmers now considered necessary in large theatres, opera houses, and big TV studios.

The latest AVAB system, launched in 1989, is the Expert. Expert controls up to 512 separate dimmers providing keypad channel access, a cross fade playback, 24 master faders, and comprehensive editing and effects options from a self-contained and well-styled desktop console. One or two colour VDUs are needed.

Channel control uses keypad access, all the usual combining aids, and a velocity fader. Moving the centre biased lever upwards starts the dimmer level increasing, and the further the lever is pushed, the faster the level changes. Moving the

lever down produces the opposite result. Not as satisfactory, perhaps, as a wheel, but less expensive and quite appropriate to this application. As an option to "reverse Polish" logic, the "@ [at]" mode of operation used by other manufacturers can be easily selected. Crossfade operates exactly like Viking and has most of the same facilities for memorising fade times, delays, follow-on and sequences. During crossfades the dimmer level control acts as an accelerator/brake on the memorised speeds. Unlike Viking, the group or mixer masters are linear potentiometers but these can be loaded with memorised effects and related while in use to provide the hands-on mixing required for designer-operated pop concerts. To minimise the number of buttons on the panel some operations require holding one button while pressing another, but these are all obvious, logical operations. The two-colour VDUs are every bit as clear as the Viking displays and a new approach to menu layout makes choice of operating variables fast and easy. To save the need for an extra Qwerty keyboard, 26 of the master keys provide alpha characters as alternative outputs for entering cue text. Following modern mini-computer practice, a Help button on the desk produces on-screen explanations of the function and logic of any other button pressed, and even varies the explanation depending on the current state of the board.

System output is digital using either the AVAB system or the USITT DMX 512. Also, ports are provided to interface with standard personal computers to allow cue data to be prepared or corrected away from the console and MIDI ports so that the ever-growing range of MIDI hardware can be connected to exchange master and synchronising information. The well-known infra-red remote control established many years ago for Viking is a standard feature (with a charger slot built into the end of the desk) as are the disk drive, the excellent handbooks, and an ingenious built-in cover to protect the desk from dust and damage.

Altogether, another excellent system designer, as the name applies, for designers and operators who are already or want to become experts in the art and techniques of lighting presentation. Other companies will need to use their best efforts to compete.