An Introduction To G Series

The G Series Computer is an integrated system of hardware and software which can be fitted to any SSL mixing console to provide a comprehensive range of facilities:

**Project information organisation:** track lists, session information, notes etc.

**Tape location system:** to facilitate tape cueing, drop-ins, play/record cycles etc.

**Comprehensive fader automation system:** a choice of G Series or Ultimation.

**Total Recall with Autoscan:** stores the position of every knob and switch on the I/O modules, plus fader positions and Group VCA assignment. The stored SETUPS can then be recalled at any future point to reset the console.

**Master transport selector:** interfaces up to three different tape machines, allowing machine control to be addressed directly from the keyboard.

**Synchroniser Controller:** integrates with a five-machine synchroniser allowing complex multiple machine configurations to be controlled directly from the computer keyboard. Offsets and Mark points can be stored as part of the project data.

**Events Controller:** provides 16 or 32 programmable contact closures for accurate control of such devices as CD and cartridge effects players.

**Programmable EQ and Panning System:** provides dynamic equalisation and panning effects.

**Automated Joystick Panners:** SL5000 and SL8000 consoles only.

**Automated Graphic Equalisers:** SL5000 and SL8000 consoles only.
The Main Computer

The main computer is a fast multi-tasking minicomputer with 2 Megabytes of memory. It stores information on two 20 Megabyte portable Data Cartridges or on 8 inch Single Sided, Single Density floppy discs. The main keyboard which controls the computer is located in the centre panel of the mixing console and an additional remote keyboard can be operated in parallel. A small computer monitor is fitted to the console above the keyboard and in addition, a conventional RGB monitor is usually installed with the system.

Hardware for the G Series Computer is based on a central processor to which are added a number of sub-system processors for various optional interfaces.

Mix System

The mix system comprises a number of fader modules fitted to the input/output channels of the mixing console, and a multi-channel analogue interface in the computer. Fader levels are stored digitally along with timecode references read from the master tape machine.

G Series Mix Systems are VCA based - no audio passes through the fader. The optional Ultimation Mix System, which may be retrofitted to any E or G Series console, uses a special fader module fitted with a P&G moving fader. Audio normally passes through the fader but can be directed via the channel VCA depending on the operational needs of the engineer.

Hardware Options

In addition to the main computer, Total Recall, a Synchroniser Controller, Events Controller and up to two Programmable Equalisers can be added to the system. SL5000 and SL8000 systems may also be fitted with dual automated Joystick Panners and automated eight-band Graphic Equalisers (details may be found in the specific documentation supplied with these products). In most cases, all these devices require extra interfaces in the main computer and an additional satellite processor.
Software

The main program is supplied on an 8 inch floppy disc in order to maintain compatibility with the E Series computer. Project information and dynamic fader level data are normally stored on the Data Cartridge but may be alternatively stored on floppy disc.

Although there are many similarities, software is specifically supplied for the following three types of computer system: G Series Systems, G Series Systems with moving faders (SL5000 only) and systems equipped with Ultimation.

G Series and Ultimation software stores mix information in a completely new format compared with E Series and this makes for increased speed and ease of operation. E Series mix information can be read by the new software and converted to the new format to maintain compatibility. The latest version of G Series software (G3.0) is fully compatible with Ultimation software. If required, mix data from these two systems may be converted to be read by earlier (G2.12) systems.

Large and complex mixes are handled effortlessly, on and off-line. Everything from copying data to editing and joining multiple mixes has been refined to take maximum advantage of the increased speed and vastly expanded on-board memory, when compared to E Series. Complex off-line processes which previously took minutes are now complete in seconds.

Mix data can be freely copied from channel to channel and from point to point in time. Selective rollback and enhanced mute management provide new flexibility in coping with the demands of music recording and post production.

In addition, the Fader Status Controllers - Update Absolute, Revise Cuts, Play Cuts Only, Autotakeover, Preview, Immediate Pickup, have added a new degree of flexibility by making the available fader statuses easily accessible.

Ultimation and G Series software now provide the facility of up to 15 Software Control Groups which, along with the console's 8 hardware groups, greatly increase the system's grouping possibilities in an automated mix. Further enhancements to the mix system, such as Insert Mixing, have also been incorporated into the latest software.