S2 TURBO/S3 TURBO/S2R MUSIC PROCESSOR

GENERALMUSIC

S2 TURBO - S3 TURBO - S2 R
Music Processors

hatever kind of music they play, modern musicians have many needs in common.
- Real-time performance and control of parameters.
- Availability of an endless library of new sounds.
- A computer-like, simple and intuitive interface.
- Complete control of all MIDI instruments and units.

S2 Turbo is the perfect Music Processor for musicians who demand only the very best from themselves and from their instruments.

S2 Turbo is an advanced synthesizer with an endless series of new sounds, a sophisticated keyboard - based recording studio, a complete MIDI master keyboard controller.
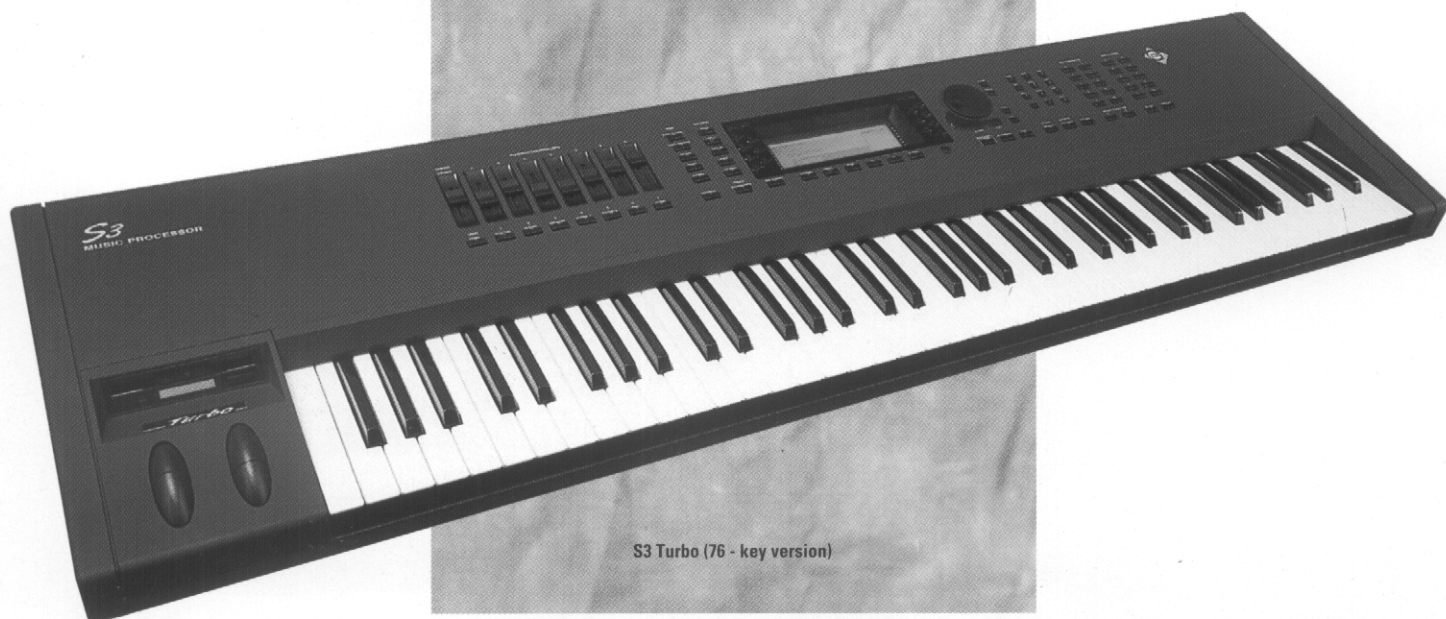
S2 Turbo Music Processor is available in a 76 - key version (S3 Turbo) and in the rack version (S2R Music Processor).

GENERATION

S2 Turbo, S3 Turbo and S2 R have a rich and resonant personality of their very own, the result of technological and musical expertise applied with a rare touch of genius. The attention dedicated to natural sounds and the latest methods of electronic synthesis means that S2 Turbo, S3 Turbo and S2 R can completely satisfy all the requirements of music-makers both now and in the future, with a range of tone shadings that ranges from purely digital to the fattest analogical sounds ever heard. Advanced techniques such as Crossfade Multiloop allow the whole 6 Megabytes of internal ROM memory to be exploited for the generation of an enormous variety of sounds, which can be manipulated and elaborated with powerful intuitive editing functions. 6 MB of ROM Waveforms offer you 500 sounds that can be incorporated in 100 editable performances; more than 1500 new sounds can be created, stored in the internal memory bank and used at once or transferred onto diskettes to form a vast personal library. S2 Turbo, S3 Turbo and S2R also feature a 2 MB RAM that allows new sounds to be loaded from the vast library of disks made available by Generalmusic, with regular updates. In addition to importing new PCM samples via MIDI from the most widely-used samplers, S2 Turbo, S3 Turbo and S2R read various disk formats, including Akai, Sample Vision, Wave, Avalon and Sound Designer. The new Waveforms can be displayed graphically and zoomed for editing parameters such as loop start and end points.
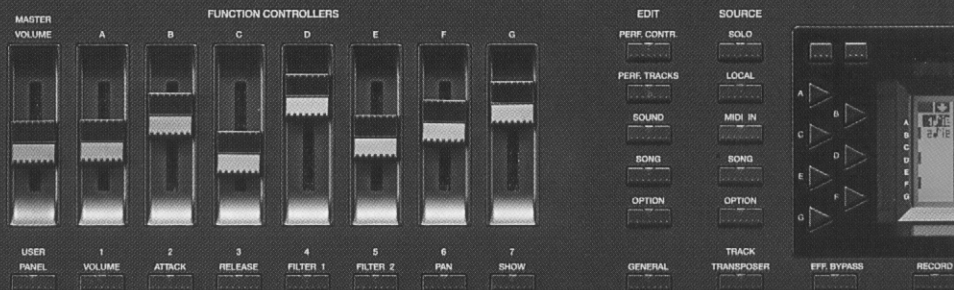
EDIT

For a musician, one of the most important characteristics of a technologically advanced instrument is that the sound parameters can be controlled in real time during actual performance, and edited swiftly and creatively during the programming phase. S2 Turbo and S3 Turbo incorporate a section of 7 programmable sliders and 7 pushbuttons dedicated specifically to this task. Parameters such as filter, pan, volume and many others can be assigned to these controls and directly modified with only a few movements. Every new sound created by the player can be given a name, which is automatically linked with the time and date of creation to assist in the rational storage and recall of the many sounds that can be memorized. Another useful feature is the Clipboard, similar to that used on computer editors, and this allows entire pages of editing to be stored in a dedicated memory area and used later or in different situations. In addition, all parameters controlled by the operating system can be regularly updated with the software diskettes produced by Generalmusic to keep the S Series tuned in to the most recent technological developments. The large backlit display gives a clear and effective visual representation of the operations carried out simultaneously in the various function environments.

S3 Turbo (76 - key version)

S2 MUSIC PROCESSOR

MASTER VOLUME — A — B — FUNCTION CONTROLLERS — C — D — E — F — G

EDIT | SOURCE
PERF. CONTR. | SOLO
PERF. TRACKS | LOCAL
SOUND | MIDI IN
SONG | SONG
OPTION | OPTION

USER PANEL | 1 VOLUME | 2 ATTACK | 3 RELEASE | 4 FILTER 1 | 5 FILTER 2 | 6 PAN | 7 SHOW

GENERAL | TRACK TRANSPOSER | EFF. BYPASS | RECORD

Turbo

MASTER KEYBOARD

All features of the S Series Music Processors have been created to satisfy the many requirements of modern musicians. S2 Turbo and S3 Turbo offer much more than the usual MIDI functions, and can be used as powerful, versatile and sophisticated Master Keyboards to control all your MIDI machines. Double MIDI sockets (2 In, 2 Out, 2 Thru) allow you to work with 32 separate channels, and the MIDI Merge function makes it possible to process incoming MIDI messages, filter them and route them to another MIDI output channel, with the added bonus of Polyphonic Aftertouch. S2 Turbo and S3 Turbo can simultaneously control 16 MIDI channels with 16 split zones or 16 layers, and each of the 16 parts is able to respond independently to commands such as Dynamic Curve, Dynamic Range, Pan, MIDI Delay and Transpose. 7 MIDI input filters and 7 MIDI output filters are also available. Other real-time controls include fully programmable wheels, footswitches and pedals which further enhance the versatility of S2 Turbo and S3 Turbo.
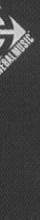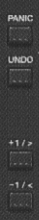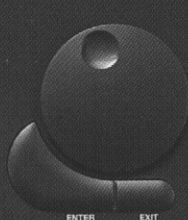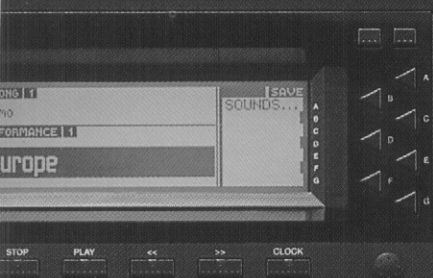
EFFECTS

The powerful built-in processor of S2 Turbo, S3 Turbo and S2 R can generate 2 sections of professional editable effects at the same time and these can be controlled in real time. The first section simulates the reverberation produced by any kind of ambient (Room, Hall, Plate, Church etc), and the second creates rich modulation effects such as Chorus, Flanger, Phaser, Rotary, Pan Echo, Delays and others. Each effect can be assigned to any of the 16 parts. Obviously, there is an editor feature that allows an infinite collection of custom effects to be created and stored on diskettes. The controllers of S2 Turbo and S3 Turbo (wheels, switches, sliders and function buttons) can all be used to activate and select the effects of the 2 sections and set their levels.

▼ **S2 R Music Processor**

MUSIC PROCESSOR

Connection Panel

The keyboard display shows:
SONG 1
SAVE
SOUNDS...
PERFORMANCE 1
urope

Panel labels: PANIC, UNDO, ENTER, EXIT, +1/>, -1/<
ABC JKL STU, DEF MNO VWX, GHI PQR YZ+
PERFORMANCE 1 2 3 4 5 6 7 8 9 10
BANK / SONG 1 2 3 4 5 6 7 8 9 10
STOP PLAY << >> CLOCK
NORMAL CLIPBOARD DISK SOUND LIBRARY EFFECTS LIBRARIES MIDI OFF MASTER TRANSPOSE UTILITY PRELOAD
GENERAL MUSIC

SEQUENCER

The 16-track sequencer built into S2 Turbo, S3 Turbo and S2 R has a global memory capacity of around 250,000 events, for up to 10 songs, and is compatible with the Standard MIDI File.

The possibility of having 10 songs stored inside and ready for instant recall, as well as being able to load additional songs and PCM samples during performance, represents an enormous advantage for professional players.

The concept behind S2 Turbo, S3 Turbo and S2 R is the Multitasking operating mode, which restores complete control of the instrument to the musician, allowing an ample range of functions in different environments to be used at the same time.

For example, whilst a song is being performed, its sound parameters can be modified in real time, and simultaneously, other songs and PCM samples can be loaded through the disk drive. The professional-quality editing functions enable you to copy, cancel, move or quantize on each separate track, and the

Fast-Forward and Rewind buttons can be used to locate the exact point in which these changes are to be made. With the Microscope function, any kind of note, program change, controller, pitch, tempo, channel and poly pressure parameter can be edited for every single event.

The Undo function can be used in the case of errors, returning the system to the status of the last operation performed.

The sequencer also makes it possible to control external units on 32 independent MIDI channels, with two separate MIDI Out sockets. When a song has been programmed, use the programmable sliders to set volume levels, and concentrate on the final mix. The songs stored in the internal memory can be transferred onto high-density diskettes formatted to 1.62 Megabytes. Up to 100 Songs divided into 10 Groups can be saved on a single disk. Disks can also be formatted in MS-DOS (1.4 MB) or Atari (720 KB).
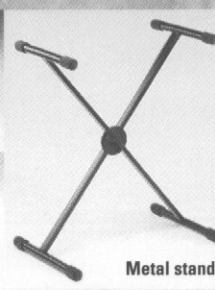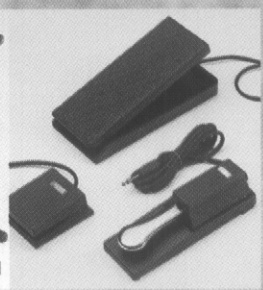
▼ S Series software

▼ Flight Case S2 Turbo/S3 Turbo
▼ Carrying bag S2 Turbo/S3 Turbo

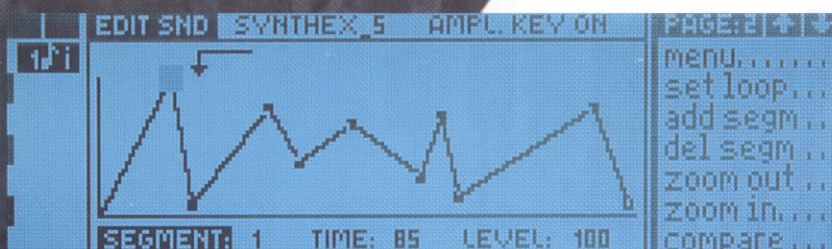▼ Piano Footswitch-Footswitch Multifunction pedal

Metal stand

▲ Turbo Kit (upgrade kit for adding all the "Turbo" features to S2 and S3).

SOUNDS LIBRARY | FAMILY
1♪ie El_Piano_2   5-2   Family: search....
2♪ie Rhodx III   5-3   Piano   srch next:
3♪ie El_P_Chim   5-4   MASK......
4♪ie ElPiano_32   5-5   3/ 9/1993-14:00   move......
5xie Syn_El_P1   5-6   delete....
6xie Syn_El_P2   5-7   <enter> to hear   imp_disk..
7xie El_Piano_3   6-1   imp_ramd..

SOUND GENERATION: Sound library

SAMPLE TRANSLATOR V 2.0 SIZE=20 KB   ORIG=A0
11♪i   Zoom......
        Gain......
        Loop nr: 1 .
        Send......
        Exit......

SOUND GENERATION: Sample Translator Version 2.0

EDIT SND SYNTHEX_5   AMPL. KEY ON   PAGE:

1♪i   menu......
       set loop...
       add segm..
       del segm..
       zoom out..
       zoom in...
SEGMENT: 1   TIME: 85   LEVEL: 100   compare...

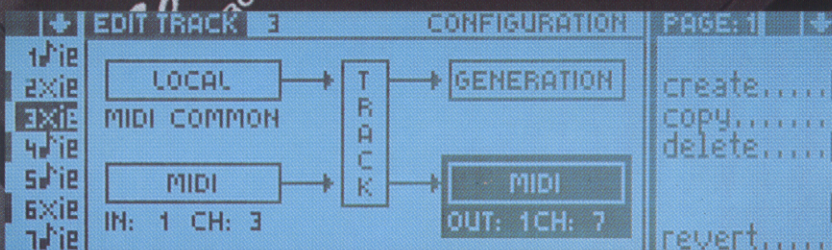**SOUND EDIT: Envelope modelling**

EDIT SONG TRACK 1   MICROSCOPE   SELECT
1♪ie LOCATOR STATUS 1V 2V 3V GATE   menu......
2♪ie   1   1   1 START SONG   rec/play..
3♪ie   32   4 191 PR.CH. 120 10 ---   ---   mask......
4♪ie   33   1   1 NOTE F#2 127 61 766   ins:NOTE .
5♪ie   34   1   3 CNTR. 123   0 ---   ---   insert....
6♪ie   34   4 192 END SONG   delete....
7♪ie   catch loc..

SEQUENCER: Microscope editing of single events

SHOW   VOLUME
1♪ie   42
2♪ie   81
3♪ie   29
4♪ie   127   F.C. reset .
5♪ie   59
6♪ie   90
7♪ie   119

SEQUENCER: Mixdown of tracks

EDIT TRACK 3   CONFIGURATION   PAGE:1
1♪ie   create....
2♪ie LOCAL → T → GENERATION   copy......
3xie MIDI COMMON   R   delete....
4♪ie   A
5♪ie MIDI → C → MIDI
6xie   K   OUT: 1CH: 7
7♪ie IN: 1 CH: 3   revert....

MASTER KEYBOARD: Tracks configuration

TECHNICAL SPECIFICATIONS

KEYBOARD: 61 keys (S2 Turbo), 76 keys (S3 Turbo). Weighted synthesizer type, Dynamic and Polyphonic Aftertouch sensitive.
Rack 3 unit (S2 R)

SOUND GENERATION: PCM, Wavetables, Multiloop, Crossfade Multiwave and Subtractive Synthesis
6 MBytes internal ROM (Sounds)
2 MBytes internal RAM (PCM Samples)
6 x 18 Bit DACs
4 Sound Edit Modes:
Single, Dual Oscillator, Dual Crossfade, Sound Patch Matrix (for programming Drumkits or special Sound configurations).
2 Digital Effects Processors (Reverbs + Delays + Modulation effects)
32 oscillators
Polyphony 32 notes max.
Dynamic allocation of voices with assignable priority
16 parts multitimbral, 16 Layers, 16 Splits, 32 Dynamic Switches
32 digital filters, fully programmable (5 resonance types with Low Pass, High Pass, Band Pass, Parametric Boost, Parametric Cut)
Dynamic Stereo Panning

CONTROLS: S2 Turbo, S3 Turbo: 2 Wheels, 2 Pedals/Footswitches, 7 Function Buttons, 7 Sliders, all fully programmable, Volume Pedal
S2 R: 2 Footswitches, Volume Pedal

MEMORY: Motorola* MC68302 microprocessor (16 Mhz)
6 MBytes internal ROM (Sounds)
2 MBytes internal RAM (Sequencer)
2 MBytes internal RAM (PCM Samples)
Sample Translator Version 2.0 already installed.
This reads disks in a range of formats, including Akai* S1000 (HD formatted), Avalon, Sound Designer, Sample Vision and Wave.
Sound Library (500 internal sounds and over 1500 sounds storable in RAM)
DSP Effects Library (64 + 64)
100 Performances
10 Songs
Optional Static Memory Expansion (512 KB).

EDITOR: Desktop Editing with graphic display of functions
Undo, Compare and Clipboard functions
Graphic Display: 240 x 64 pixels, neon backlit
14 function buttons
Internal time/date clock

SEQUENCER: 16 tracks
Resolution: 1/192 of 1/4 note
Events: approximately 250,000
Background Song Loading (new songs and PCM samples can be loaded into memory section with Sequencer operating)
Realtime, Overdub, Quantize, Realtime Delay, Microscope Editing. Compatible with Standard MIDI File (compatible with Atari/MS-DOS)

DISK DRIVE: 3.5" high-density diskettes
Formatting in 1.62 MB. Formatting in MS-DOS (1.4 MB) or Atari (720 KB).
Loading and saving: PCM Samples, Sounds, Songs, Performances, DSP Effects
Sample Data Compression (up to 2 MB of Sample Data stored on a single disk).
Loading of software updates with new User Programs and software options
Possibility of saving up to 100 Songs and/or 1000 Performances divided into 10 Groups on a single disk.

MIDI: Complete Master Keyboard functions
32 independent MIDI channels
2 MIDI In
2 MIDI Thru
2 MIDI Out
Midi Merge (Input MIDI data can be processed and modified)
Song Position Pointer In/Out (Play Mode).
System Exclusive.
Clock In/Out

AUDIO OUTPUTS: Stereo Master (L/R) + 4 outputs programmable separately or in pairs
Headphones

DIMENSIONS: S2 (LxHxD) 1055x116x350 mm
S3 (LxHxD) 1267x116x350 mm
S2R (LxHxD) 434x132.5x276.5 mm

WEIGHT: S2: 16 kg
S3: 18.5 kg
S2R: 7.3 kg