

AUDIO / SIGNAL
PROCESSING



...with **SCAMP**

The SCAMP S24

EFFECTS POSSIBLE

- * *Automatic Double Tracking*
- * *Flanging, pos or neg*
- * *SPIN, pos or neg*
- * *Limited SPIN*
- * *Hall effect*
- * *Hollowing*
- * *Cardboard Tube*
- * *Wow-Wow*
- * *Vibrato*
- * *Motorbiking*
- * *Dalek voicing*
- * *and many, many more.....*

Carefully considered development the watch word of Audio & Design (Recording) Ltd. has given rise to yet another '1 inch wonder' —the SCAMP S24 Time Shape Module. This ADT/FLANGER effects package is ready to join the ranks of the SCAMP system and outperform its 19" rack mounting contemporaries. In less than 20% of the space taken up by most processors ADR have managed to cram in all the electronics necessary for time domain modification — and then some more!

We are talking, of course, about the S24's front end limiter which will happily allow anything up to 100% audio feedback without howling off into hyper-space. We call this Limited Spin and its the nearest thing to a programme controlled synthesiser yet. Modulating 100% Limited Spin via Aux or main input will create effects with a kick that can be held indefinitely and modified infinitely.

OPERATIONALLY the SCAMP S24 Time Shape Module performs all the tasks currently available from other analogue time domain processors. These are accomplished with ease via the neat, clean and functionally uncluttered front panel controls. It also brings the concept of the front end limiter to reality for delay line protection. This in conjunction with feedback control and positive or negative direct, feedforward signal mixing, realises the unique Limited Spin capabilities. 100% feedback without overload is now possible for synthesiser effects —you can lay a whole backing track from one hand clap!!

But not all operational goodies are on the front panel. Via the rear connectors it is possible to route the delay* or half delay output elsewhere, extend the delay by inserting further S24's in series (45mS chunks max), produce stereo reverb by cross coupling two S24's or drive the delay swing about manual centre from a different function generator. All of this can be normalised on a standard jack field for line level interface in the mix.

TECHNICALLY the SCAMP S24 Time Shape Module uses half stressed compander chips to give excellent frequency response figures throughout the delay range. Distortion is better than 0.3% overall @1kHz referenced to the limiter threshold and, referenced likewise, signal to noise ratio is better than -80dB. The delay chips themselves are bucket brigade technology with 1024 'buckets'.

The Oscillator provided for programmed effects will smoothly sweep down to one tenth of a cycle per second for ultra slow passes, or up to ten cycles per second for siren, wow-wow and other effects. The delay ranges provided accurately reflect where flanging ends and ADT begins to aid speedy mode selection.

The front end Limiter stands guard at all times to eliminate delay line clipping, a restricting factor on other analogue delay units, yet contributes creatively by making the synthesised effects of Limited Spin possible.

Very competitively priced, the SCAMP S24 Time Shape Module is just the first in ADR's planned series of effect units, all for slotting straight into the SCAMP System!

If you haven't already, get your SCAMP rack installed and join the 'Scampaign' for creative, quality music.

Time Shape Module

INPUT

—controls programme level into the limiter and through the audio chain. →

AUXILIARY INPUT

—an alternate input allowing direct signal injection into the main audio path. Use two S 24's cross linked here to create stereo reverb. Alternatively add or feed back externally processed (gated, equalised etc.) signal. →

SYSTEM IN / OUT

—For A-B comparison to reassure your ears. →

DELAY RANGE

—select 1.2-11mS for Flange/effects (I) or 11-45mS for ADT/effects (II). Either way will freak you! →

ENVELOPE FOLLOWER

—generated from the average value of the audio signal level increases the delay (manually established) proportional to the programme modulation. →

FREQUENCY

—determines rate of full swing. Variable 0.1—10Hz for doppler and siren effects. →



LIMITER ON—Red l.e.d. denotes limiting action. ←

← Signal presence

SPIN —Situated in the feedback path, determines amount of feedback information entering the limiter. 100% is possible without overload as the limiter damps and sustains the signal at threshold level. ←

FLANGE

—intergrates direct signal in feed forward manner with positive or negative phase relationship. This gives maximum flexibility for flange/phasing effects, normally on short delay setting (I). Incorporate spin to enhance effect, cardboard tubing and so on. Increase delay and spin for progressively hollow characteristics. ←

Twin l.e.d. for visual indication of delay setting. Maximum delay attained when left l.e.d. fully off, right l.e.d. fully on. ←

MANUAL SETTING

—variable sweep operation infinitely varies delay length between RANGE min/max. ←

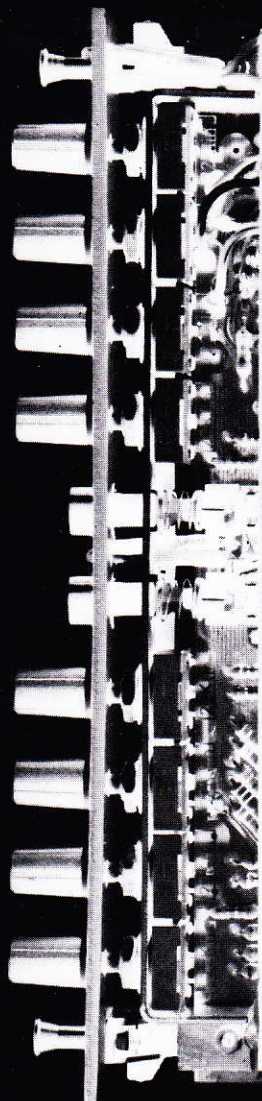
MODULATION

—varies the delay swing about the manually determined centre. Set manual delay pot mid-way for maximum modulation of swing over total delay range (I or II). Increase or decrease manual delay pot for 1/2 wave positive or negative squaring (RAMPING). ←

Technical Specification

FREQUENCY RESPONSE	: 20Hz — 15kHz, +0, -0.5dB 20Hz — 17kHz, +0, -3dB	} —At any delay setting
SIGNAL - NOISE	: Better than -80dB ref Limit threshold	
DISTORTION	: Better than 0.3% THD @ 1kHz ref Limit threshold	
MAX. INPUT	: + 24dBm	
MAX. OUTPUT	: Controlled by limiter to +6dBm rising 3-4dB in FLANGE mode. + 24dBm in bypass mode — balanced.	
LIMIT THRESHOLD	: + 6dBm	
DELAY	: RANGE I 1.2mS—11mS RANGE II 11mS—45mS	} —Variable pot

And here are nine more reasons for wanting **SCAMP**



S 01 Compressor-Limiter

A simple-to-operate multi-ratio compressor with overall peak limiter and l.e.d gain reduction meter.

S 03 Sweep Equaliser

A 3-band sweep equaliser offering 40dB control range switchable on each section. Input attenuator and optimum modulation indicator.

S 04 Parametric Equaliser

A 3-band fully parametric equaliser with 40dB range; shelf option with variable slope on Hi and Lo sections. Each section switchable with optimum modulation indicators.

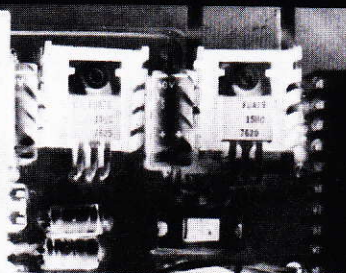
S 05 Dynamic Noise Filter

This programme controlled high-pass filter automatically attenuates hum and rumble. It has variable slope (0—18dB/oct) and three t/o frequencies. Can also be used as a 20/40dB noise gate.

S 06 Dynamic Noise Filter

Similar to S 05 but being the low pass version, cleans up hiss and HF splash without affecting wanted HF transients.

Alternatively acts as a wide-band noise gate.



S 07 Octave Equaliser

Ten-band octave equaliser set on standard ISO centre frequencies from 31.25Hz—16kHz. Optimum modulation indicator.

S 08 Distribution Amplifier

Features 2 in, 8 out with discrete amps on all outputs.

S 14 Quad PPM l.e.d column

Has brightness control and can be ganged with other S 14 modules.

S 23 Pan Effects Module

Offers different *pan* patterns with *trigger*, *speed* and *envelope* following functions.

F 300 Expander Gate

Peak and averaging side-chains; variable slope with up to 40dB range; adjustable release/attack and external trigger create the most sophisticated unit available.

all fitting the standard rack to join the S 24 Time Shape Module in the SCAMPAIGN for better sound.

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