

# Channels

The professional Sound and Lighting magazine

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Free

## Soundcraft SPIRIT: mixer for the masses



Soundcraft has just released an affordable mixing console, "SPIRIT", in two model lines, LIVE and STUDIO. Soundcraft is so serious about market leadership that it has taken a reduced margin on Spirit, rather than cut features to cut the price. Spirit Live pricing, for example, sees the 16 channel console list at around A\$3990.00. Note this is list price, not street price.

The LIVE version comes in 8, 16 or 24 channels. STUDIO is a totally different beast, configured 16:8:2 or 24:8:2, with up to 56 inputs.

Spirit meets the avalanche of Asian origin product head on, with the benefit that Soundcraft builds Spirit themselves - they haven't done a DBX and setup a factory in some steamy climate up North, with the ensuing uncertainty that that particular pursuit of cheapness entails.

What they have done is take a gamble, and to reinforce the risk, Soundcraft distributors around the world have been put firmly on notice that Spirit Must Sell.

Fortunately, they have done their homework, listened to the customer, and delivered the goods. Spirit was designed by Soundcraft's Graham Blyth.

The console is a flat topped, folded panel design with an extruded front strip that conceals a carry handle and has a pen slot. The sides are a moulded compound, stylised very nicely with the Spirit logo. Scribble strips top and bottom and clear graphics, along with Soundcraft's ergonomic knobs and switches make for an attractive mixer.

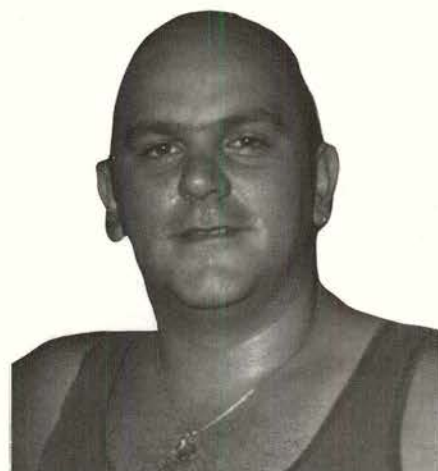
Importantly, the build quality is there - XLR connectors are Neutrik, long throw faders are Alps, components are Japanese, PCB's are vertically mounted and pots are bracketed. Service appears easy, and the frame seems roadable.

Soundcraft have undergone something of a revolution in recent years, their product range has been almost totally renewed.

The world wide release of Spirit was subject to a strict embargo, with Soundcraft's International Sales Manager, Alan Archer, meeting with distributors in each country during November. This sort of whistle stop world tour is the sort of job you would not want, especially with a mixing console as baggage.

The Spirit LIVE console was released on February 1st, and is profiled elsewhere in this issue of Channels. Spirit STUDIO will feature later in the first half of the year.

- SPIRIT LIVE; OVERVIEW: Page 6.
- SPIRIT LIVE, FEATURES: Page 7.



## Frank Calvi .. on fashion lighting

Nothing prepared me for my first encounter with Frank Calvi. The year was 1982, and Frank appeared as a loader at a gig, and soon had the crew in stitches. It wasn't just the banter, but his sound effects, which words cannot describe.

Then, the business card. "Francesco Calvi, Cuddly Person" the card announces. "Open 7 days and nights. Free on site quotes". He still issues the card, but these days leaves the address off. "The old cards had my Mum's place, Pinus Ave, Glenorie on them. Some bloke rang up late at night, asking for Francine, thinking the card was some sort of come-on. Mum said: look,

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# AUX 1

## The people column

Phil Burkinshaw advises he is available as a "gun for hire", to arrange crewing, personnel, rigging, woodwork, metalwork, anything. The man has a long history, having introduced the Par Can to Australia when first visiting as Osibisa's L.D. in 1973. He stayed, established Crazy Maze Lighting, and probably taught Colin Baldwin a thing or two. More recently he is the dapper looking fellow in a suit in the advertisements for Flexistage Australia. Phil can be phoned on (018) 386-481.

.....  
**Humble pie time** ... our U.S. correspondent reports the result of a survey, in which the Pro Sound Industry was fiscally compared to the Potato Crisp Industry. The Pro Sound biz Worldwide turnover was just 8% that of the Crisps. What our man didn't say was just why the comparison with Crisps? Why not frozen beans?

.....  
 A Sydney woman has successfully sued her ear specialist for damages, arguing he didn't tell her to stay away from loud music. After two hours at a disco, the woman found herself nearly totally deaf. The judge ruled the doctor should have advised the woman during an earlier consultation.

.....  
 A marital dispute threatens the assets of a touring production company. The wife has let it be known she intends fighting for as many of the assets as possible, through the courts. Then, she says, she will move interstate, and join forces with an opposition company.

.....  
 More business name hassles, the proprietor of a Sydney Lighting Hire operation would like to change the name, having recently bought the business from its second owner. The new owner rightly feels the business needs a new image, as it is named after its first owner, who is long gone. Problem arises because in the same premises is a Sound Hire company, also named after its departed owner, now owned by a mysterious chain of companies. Two businesses in one building sharing a similar name, and separately owned, with the owners in dispute. Sound tricky?

Send your news to: AUX 1, P.O. Box 171, St. Peters N.S.W. 2044.

## INSERT POINT

Business owners beware, your insurance may be worthless. A loophole in the Insurance Agents and Brokers Act has allowed a major Broker and a major insurance company to deny a legitimate claim following a fire. The fire destroyed the business, the insurer said: "the broker didn't tell us the business had new owners", and the court ordered the broker pay \$2.3 million damages. The Broker then promptly went into receivership, leaving the business proprietors with a \$500,000 legal bill, no business, and a pile of debt. The Broker (in receivership) applied to its own profession indemnity insurer, who said "sorry, you acted negligently, no dice". The policy in dispute cost the business partners \$73,000.00. It pays to photocopy every proposal, letter and note every conversation held with your agent, broker or insurer.

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## YAMAHA POWERED LOUSPEAKERS

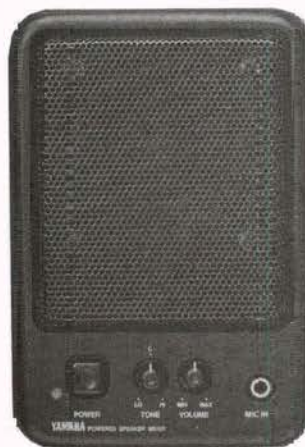
There are three models in this range, and they are very useful indeed. The MS 101 and MS 202 would suit the home recordist, and are rated at 10 watts and 20 watts respectively. The 101 was a mic input, a line input and an RCA line input, with volume and tone controls.

The 202 has a mic input, and 2 line inputs, either jack or RCA. It also has a line output, so you can connect other powered speakers, or another amplifier. These two models are magnetic shielded, so the proximity of their speakers will not erase your precious tapes, or upset your TV or computer screen.

Top of the range is the MS60S, a positive cracker of a gizmo, rated at 60 watts, with an 8" woofer and a horn type high frequency device. It uses Yamaha's Active Servo Technology, which allegedly lets you reproduce higher levels with a tight, well defined sound.

The MS60S has a balanced XLR mic input, two unbalanced jack line inputs, and separate bass and treble controls. Its got a handle, and can be wall/ceiling mounted, or even rack mounted via an optional kit. Like the two little brothers (above) it is magnetically screened, so when in a rack it won't freak out the other components.

It even has an optional foldback leg kit, which opens up possibilities, it would be an ideal foldback system in a school, church, or convention environment. Sound hire companies should love these.

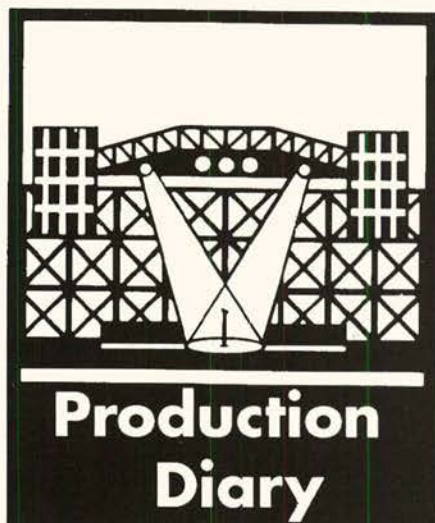


▲ Yamaha MS 101 and MS 201

## QUOTES

SPL should stand for Safe Power Levels. Put a lid on renegade SPL before the law does it for us." - Joe Spiegel, Sound Reinforcement

Editor, Pro Sound News.  
 "In 1990, 16 effects sends should be the standard." - Toby Francis, Aerosmith FCH Engineer.



## Production Diary

# NEW YEARS EVE

Sydney; Party time, the "Attitude" Party at Pier 13 featured lighting by Graftons, Vari\*Lite from Jands/Vari\*Lite, and Sound by A1 Audio. Setup started at 8am.

Across town the B & S Ball at the Bondi Pavilion

occupied two tents, the sound system was provided by Jands, and comprised 18 R3 cabinets sitting atop 8 sub-low cabinets, powered by Jands 920/960 amplifiers.

At Darling Harbour Exhibition Centre was the Fantasy Dance Party, where A1 Audio provided 40 TMS 3, 12 TSW 124 subs, a Yamaha PM 3000, Soundcraft 500 32 channel - and that was the band system. Foldback was mixed on a Soundcraft series 4, 40/16 desk, sending to 16 wedges and 4

**SKYHOOKS;** Sound by A1 Audio, Lighting by Baldwin Productions. 8 Martin 802 mid/high cabinets, 12 Cerwin Vega junior earthquake cabinets, powered by Perreaux. Soundcraft Series 4/40 FOH, Midas Pro 4 24 into 10 monitor desk. 10 JBL SLP wedges and 4 TMS-4 cabinets powered by Perreaux. 60 Par 64, 8 jet strobes, 3 super strobes, 10 Leko's, 4 molefay, 1 HTI 400 followspot, Jands Instinct 48 ch desk.

**TOM JONES;** Sound and lighting by A1 Audio. 40 TMS 3 speaker cabinets, 12 TWS 124 subs, Perreaux amps. Yamaha PM 3000/40 FOH desk, 14 SLP JBL & 4 DLP JBL wedges. Yamaha PM 2800/40 F/B desk. 16 Vari\*Lite model 2B's (from Vari\*Lite Australia), 280 Par 64, 2 Pani truss spots. Avolites QM 500 desk and dimmers.

**NOISEWORKS;** Jands Production Services, touring with the JBL Modular system, 12 stacks each consisting of a W bin, mid bin and horn, driven by Jands J920 amplifiers, FOH: PM 2000/32 ch, and Yamaha 916. Monitor desk: Yamaha 2408, 8 sends, 15 wedges. 96 lanterns, controlled by Celco Series II desk. Solar 250 projectors provided projections of ... naked girls. (Of course!)

**BILLY JOEL;** Storm Front, the BYO tour now in it's 18th month, Jands Production Services are providing the Clair Bros Mk. II FOH system, along with some Vari\*Lite support.

**RAMONES;** Jands Production Services, 32 Turbo TMS 3's, 24 subs, Jands amps, PM 3000/40 FOH desk, PM 2800/40 foldback desk, 8 SLP wedges, 2 R3 and 4 TMS 3 for foldback, 180 lanterns, 4 Lycian HTI 400 followspots, Celco Series II 60 ch control, 72 dimmer channels, 2 smoke machines and 120dB SPL. at the mix position.



RAT Party, Royal Hall of Industries; grid that travells



"Fish"; with grid motor computer



The B & S Ball: hot work at 9 AM.

TMS 3's. The Disco system in the other hall had 24 Martin RS 1200 boxes. At the Royal Hall of Industries on New Year's Eve, Jands Production Services were busy with the RAT Party, also occupying the Hordern Pavillion.

This was the largest Dance Party possible, the RAS having imposed a few conditions, namely "acoustic insulation" .. (see PIC on right!) The resultant barriers were a full 10m tall, and lined with carpet on the inside. Sydney Acoustics Consultant, Peter Knowland designed them.

The sound system within the Hall was 48 Concord boxes atop 16 Concert W Bins, driven by Jands 920/960 amps. The lighting rig was almost all Vari\*Lite, hung on a motorised grid that moved according to instructions from a

motor drive computer. Across the road at the Hordern, another 16 Concorde and 8 Concert W's provided the sound for both Disco and Live music, with a Video "environment" created by the RAT team, with three sides of screens and 9 video projectors.



## Equipment rental companies review security

Like a lightning strike or a death in the family, we tend to review our security after the swine has bolted with the goods ... shutting the gate after the nag has bolted.

New York rental facility AVT Scharff Rentals recently submitted a memo to the N.Y. Chapter of Professional Audio Recording Services, (SPARS) after two frauds in a row touched the company for US \$30,000.

The memo alerted the association to instances where rental companies and recording studios had been victim to "knowledgeable criminals", people versed in audio operations.

Back in 1986 Graftons (Sydney) started an alert system whereby each fraud was documented on a loss report, and mailed to every rental co. in the land. After the first report went out, a flood of replies came in, not in relation to the original report, but reporting even more fraud!

Graftons imposed rigid guide-lines on their customers after suffering several large losses in a row, totalling \$35,000. The policy required staff phone a referee while the customer waited, and that every customer was photographed. As well, a positive item of I.D. like a drivers licence, was to be inspected, and signature compared.

This restrictive and time consuming policy eliminated fraud entirely, but resulted in the occasional client walking out in disgust.

At the time, Graftons were billing \$15,000 in hire per week, a great proportion small hires, the transaction count was voluminous. Fraud cannot be insured against, the best marine and transit cover money can buy says: "ha ha, you silly! You hire to someone who doesn't exist, you loser"

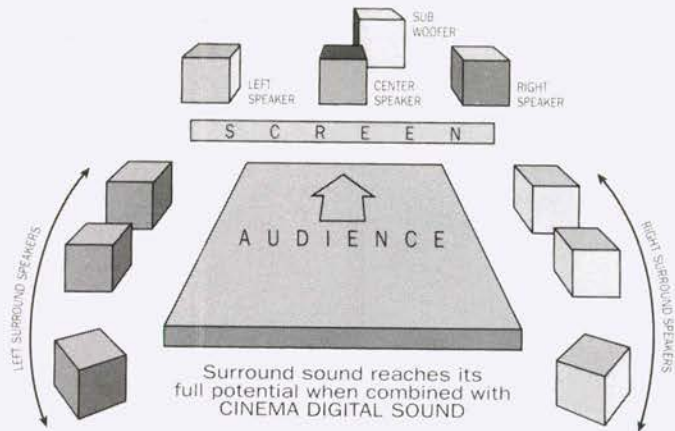
AVT Scharff lost outboard gear; Eventide, Lexicon and Focusrite to someone who must have been setting up a very hi-tech home studio.

### QUOTES

"Light whatever you can." - Advice to young designers, from Nigel Levings.

"The rum-balls have gone to a good home, and the cake will follow soon." - Xmas proverb, Annon.

"Wanted: Audio Tech with lots of love for his soldering iron & a calendar with pictures of half naked women." - Advert for recording studio vacancy, Atlanta.



## CINEMA SOUND GOES DIGITAL

### New format offers 5 channels, plus subwoofer & Midi channel

The typical cinema running a 35mm film uses an optical sound head, which reads the film and translates the optical sound-track into audio. This process has remained virtually unchanged for eons - until now.

The Eastman Kodak Company has joined forces with Optical Radiation Corporation, and produced Cinema Digital Sound™. The process involves a new sound negative film that will require a sound decoder be added to existing projectors. The process allows digital quality to be maintained throughout the process - recording, mixing and playback - without reverting to analogue.

Cinema Digital Sound™ allows six audio channels, along with a Midi channel, and has a SMPTE time code. The Midi channel will let cinema owners automate things like curtains opening, controlling the houselights, and even run a laser show.

Interviewed in Reel People Magazine, Kodak Motion Picture Vice-President Joerg D. Agin revealed the U.S. \$ cost of conversion to Digital as in the region of \$18,000 to \$22,000 - providing the Cinema is already equipped with quality surround sound speakers. Kodak Australia anticipate conversions here later in the year.

To give an idea of the quality advance this process offers, think about the frequency range difference between Dolby Stereo (Optical) and Cinema Digital Sound. The Optical frequency range is 40 Hz to 12,500 Hz, whereas Digital offers 20 Hz to 20,000 Hz. All significant specifications offer very real improvements.

## PACIFIC DUNLOP

Jands Contracting are fitting out the Pacific Dunlop boardroom in Melbourne. This boardroom will be fully configured for Teleconferencing with technical facilities including Video, Audio, Lighting and Slides, all fully remote controllable. Jands Projects Director, Peter Grisard says many corporations are refitting their boardrooms for Teleconferencing, saving on the expense of moving executives around.

## A.M. Export amplifiers again

Sydney amplifier manufacturers Australian Monitor, have been doing pretty well in Canada of late. In early 1990, AM 1000 and AM 1200 units were supplied to the Garth Drabinsky's Pantages Theatre for the show, Music of Andrew Lloyd Webber.

Then, in August, Calgary Stampede bought 25 amplifiers to run varying loads, including 70 volt line applications, through to bass/mid/high combinations. The Stampede is an outdoor grandstand show catering to 30,000 people, where chuckwagon races and a show are staged daily, as a tourist attraction.

Finally in December, A.M. announced the Sounds Interchange recording complex in Toronto had purchased 24 AM 1000 amplifiers to drive their main monitors. The complex houses five studios, and has just added four new studios, into which go the new amplifiers.

A.M. have been exporting amplifiers since 1987, and have established distributors in Finland, Italy, Spain, U.S.A., Germany, Israel, Asia, France and of course Canada, among others. Most of their production is exported, the amplifiers are certainly not cheap on the overseas market, but nevertheless saleable as a prestige product.

## Yamaha DMR 8 - Digital Domain expands again .....

YAMAHA continues innovating within the Digital Domain, announcing the DMR-8, an all digital 8 track recorder, mixer, locator and mixing automation unit - all in one. Displayed at the September A.E.S. show in L.A., the DMR 8 writes 8 tracks of 20 bit digital audio, plus a separate track for SMPTE time code, to Yamaha's M20P cassette.

Intended for use by musicians, composers and arrangers involved in commercial music production, an artist can take complete control, from idea to finished master recording, at a level of quality that meets or exceeds any available system. All signals within the integrated unit remain digital, and are not degraded by DA/AD conversion that would occur in separate units.

Try to think like you haven't seen a multitrack tape player or mixer ever before, then understanding this remarkable unit is made easier. All input is digital, a new AD converter, the AD8X, allows conversion of eight ordinary sources, XLR input, to Yamaha's D-sub standard 25 pin connector.

Each mixer channel has 3 band parametric equalisation with variable 'Q', digital pad, phase reverse, an independent effect on each channel (comp/limiter, doubling, echo, flange, emphasis and de-emphasis), and three effects sends.

Then, the unit has three digital effect units built in, aside from the individual channel effects, each digital effect unit equal to an SPX 900/1000. There are 10 motorized faders, and in mix down mode, the mixer allows 24 channel digital mixdown, accepting two 8 channel digital outboard devices.

Tape format is an original metal particle tape cassette (Yamaha M20P), which provides the 8 digital PCM audio tracks, plus two analogue audio tracks, a timecode and a control track.

To facilitate the versatility of this format, Yamaha offers the Digital recorder element of the DMR-8 as a stand alone digital recorder, the DRU-8, which can be used to create backup tapes, or as an optional slave. The DRU-8 should become standard issue in larger digital recording studios, to allow DMR-8 owners the simple facility of transferring their tracks to a larger digital multitrack.



## UREI 7110 Limiter

### JANDS AURORA SWAP OFFER

JANDS have announced owners of Aurora can trade in their lighting desks on new Instinct Memory boards, with a factory set changeover price.

Changeover prices start at \$5390 including tax, with Instinct available in 48, 60 and 72 channels.

As part of this limited offer, the Instinct Microscope P.C. Interface is available at \$450.

### BRISBANE LIVE SOUND COURSE

D.S.A. Concert Systems Pty Ltd have conducted a couple of Crash Courses recently, aimed at giving prospective live sound engineers a taste of the real thing. David DeWitt, of D.S.A., states the course covered speaker sound, equaliser changes, mixers and their features in live situations, microphone differences, and much more.

The course runs for one day, from midday till 10pm, and involves the class heading to a live venue during the evening session, for some "hands on" experience. The cost of the last course was just \$25.00, which seems very in-expensive, as it covered afternoon tea and lesson notes as well.

Hopefully D.S.A. will do it again, and if so, we will let you know, Meantime, you can contact them on (07) 252-1313 or fax (07) 252-1145.

With active balanced input and output, the 7110 is a top end compressor limiter, built in the tradition that has made Urei the audio pro's choice.

Features include "Smart Slope" compression characteristics, both peak and/or average gain reduction, user control of threshold, peak/average blend, attack and release times and compression ratio.

### Power user tips

Running subwoofers under a full range P.A. system can be different to dealing with the low parts of an ordinary system. Particularly if you have a full range composite, or a two way system, and the sub woofers are just supplementary up to 150Hz.

Often, the P.A. just hasn't got the grunt way down low, and you add on Subs to get it.

The problem is all your stage mics are open to the Subs, while only really kick, bass guitar and maybe some keyboards need the extra kick the Subs provide.

Low end feedback gets worse with front loaded cabinets, which lack the velocity or projection that horn loaded cabinets and W bins have, despite the fact that really low frequencies are almost omni-directional anyway.

One way to beat the problem has always been to use an auxiliary send for the subs, sending just the low parts out the aux. send, and keeping the rest of the mix routed through the main left and right P.A.

This solution does eat up a valuable auxiliary bus, which can be a hassle, so Soundcraft's new Spirit LIVE desk is a step in the right direction with it's three output busses. On Spirit, you just Mono Bus assign the critical low bits, and send the rest to the left and right masters.

Having very good control over the low end really tightens up your mix, moreso in those highly reverberant places where there is usually a problem.



# Soundcraft SPIRIT

## New mixing methods, extra equalisation and lower price- this is 1991

The Spirit LIVE is available in 8, 16 or 24 channels, and is a departure from convention in that it has a left and right master output, along with a mono master output. The reasoning is that in a live sound reinforcement situation it is likely most PA systems are mono, and the Spirit allows the three outputs to be used as three subgroups in this situation.

Another use of this output is as a center cluster, or discrete zone send, or even separate mono subwoofer send in a stereo PA application. (See ProUser Tips, this issue.) The Soundcraft rationale that most PA's are mono, and therefore the desk has three submasters is quite valid, the channel assignment allows you to send each channel to the left/right masters, and/or the mono master, via two switches.

At the master output end of the mixer, another switch lets you assign the left and right masters to the mono master, or leaving them switched out where an independent or mono output is desired.

That the Spirit LIVE is not a conventional 4 subgroup stereo out console, matters not one bit in this writer's view. Sub groups add considerable cost in terms of channel wiring, and in many cases are used wrongly or set in such a manner that the gain structure of the

mixer is violated.

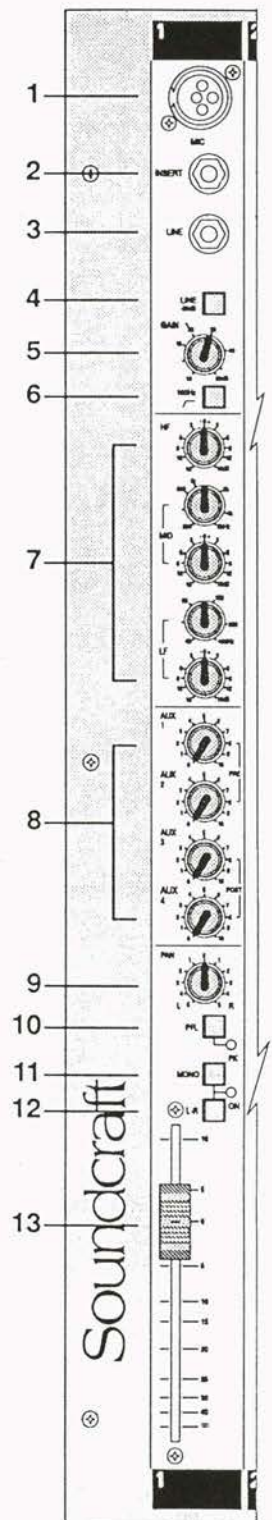
Equalisation on Spirit Live is three band, with the low frequency and mid frequency sweepable (variable frequency centre selection) - the high frequency is a set shelf. The lower frequency sweep covers a range from 40Hz to 400Hz, the midrange sweep is from 250Hz to 8kHz. Each of the three cut and boost controls allow  $\pm 15$ dB.

If equalisation is versatile, (and it is a long way ahead of the dreaded fixed four band setup in the old 200) then Spirit maintains usefulness with four auxiliary sends from each channel.

Power supply is external, and each channel is wired for +48v phantom power, with one disabling switch. Individual channels may be phantom disabled if required. External power supply is a feature Soundcraft wisely didn't economise on. Internally located power supplies create noise, no matter what the specifications say.

Specifications are very respectable, for example Total Harmonic Distortion is better than 0.02%, dropping to 0.005% at 1kHz. Cross-talk is virtually nonexistent, CMRR and Noise are all well below many consoles costing \$10,000 and upwards.

## INPUT



The Soundcraft Spirit Live. Range of PA mixers available in 8-3, 16-3 and 24-3 configurations.

# Live

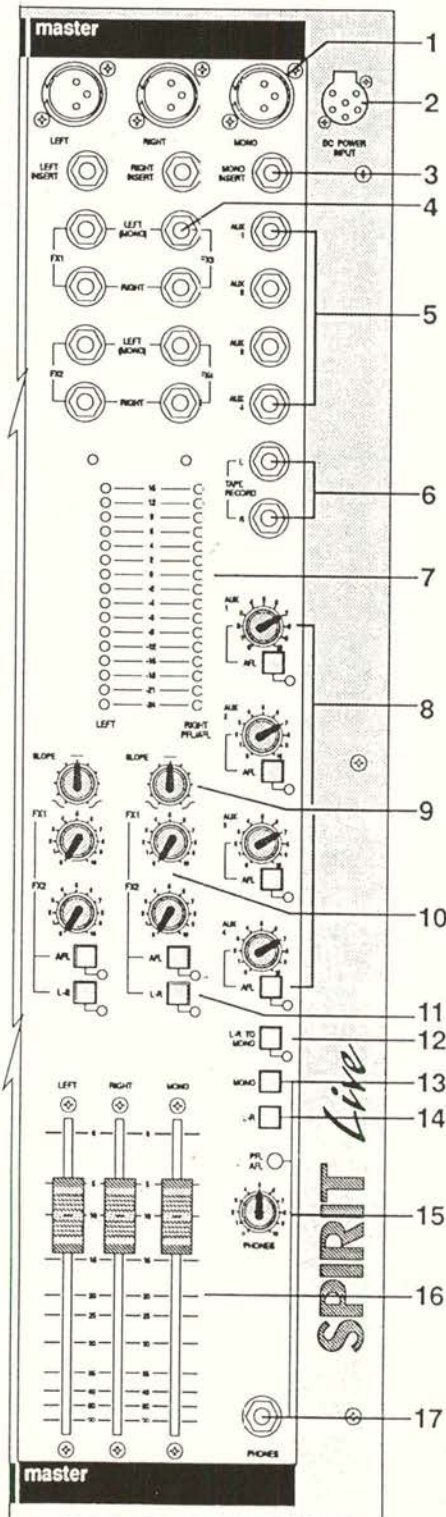
## MASTER

### INPUT SECTION

1. Microphone input; Accepts balanced or un-balanced XLR inputs.
2. Insert; a breakpoint via 3 pole jack socket, allows signal to leave and return to the channel where external processing is required, like limiting or gating.
3. Line input; selectable by switch (4), allows line level input via 3 pole jack socket. Hi impedance, suitable for effects, tapes or instruments.
4. Line select; enables line input (3) to be used. Gain is reduced by 20dB.
5. Gain control; sensitivity of microphone input, covering a 50dB range.
6. Hi-Pass filter; drops frequencies below 100Hz. Useful on live vocals and to remove hums and rumbles.
7. Equaliser; (EQ) comprises three sections, the upper control boosts (+15dB) or cuts (-15dB) HF (Treble) at about 14kHz. The Mid and LF sections each allow variable frequency selection (top control each section), and boost (+15dB) or cut (-15dB) of the selected frequency. The Mid frequency selection sweep allows any frequency from 250Hz to 8kHz, and the LF sweep is from just 40Hz to 400Hz.
8. Auxiliary sends; route the input ch. signal to any one or more Aux. busses, which are separate outputs independent from the main outputs. Used to "send" signal to effects, or foldback (stage monitors). Aux 1 & 2 are pre-fade (before the channel fader), Aux 3 & 4 post-fade (after the ch. fader).
9. Pan; determines the position of the signal within the stereo image. Rotation fully clockwise feeds the signal solely to the Left mix, while rotation clockwise sweeps the image to the Right.
10. PFL/Peak LED; When the PFL switch is depressed the pre-fade signal is fed to the headphone, or PFL, output. The LED indicates the PFL buss is reading this channel. When the PFL switch is not depressed, the Peak LED serves as a Peak indicator, illuminating 4dB before clipping.
- 11/12. Mono & L-R; The input channel signal is routed to the main STEREO mix, (L-R) or a separate MONO bus, by pressing the respective switches. If either or both switches are depressed, the LED will illuminate.
13. Channel fader; long throw (100mm) Alps fader, normal operating position is at 0dB, giving +10dB of gain available above that point if required.

### MASTER SECTION

1. Main outputs; the LEFT, RIGHT and MONO outputs are XLR connectors, driven by ground compensated output amplifiers.
2. D.C. power socket; the external power supply connects via this socket.
3. Inserts; like the channel inserts, allow external processing gear to be connected (inserted) into the output signal path.
4. Effects returns; four stereo effects returns allow external gear like effects or tape players to be returned to the mixer without gobbling up input channels.
5. Auxiliary outputs; standard 3 pole jack sockets driven by ground compensated output stages.
6. Tape record; separate left and right tape feeds at -10dB level.
7. Bargraph meters; these 16 segment, 3 colour meters provide visual indication of output levels, set to a PEAK characteristic. If PFL or AFL is active, the Right meter displays the level of the selected PFL/AFL signal.
8. Auxiliary masters; each Aux. send has a rotary master, and an AFL switch to monitor the signal after the master. A LED indicates the AFL switch is depressed.
9. Slope; Allows tone control of effects return 1 and effects return 3.
10. Effects return level; for each of the four stereo effects returns.
11. AFL/L-R; The AFL switch routes each pair of effects returns to the monitor, and the L-R switch routes signal to the left-right outputs. The LED's show the switches are active.
12. L-R to mono; feeds the left and right outputs to the mono bus, allowing the stereo bus to be used as two mono subgroups mixed down to a single output when stereo is not required.
- 13,14. Monitor selection; determines which output will be monitored by the headphones and the meters.
15. Headphone volume; determines how loud your headphones are!
16. Output master faders; masters for left, right and mono.
17. Headphone socket; suits headphones with an impedance of 400Ω or greater



### SOUNDCRAFT FAMILY

Spirit LIVE and STUDIO  
Delta 200, 8 - 32 channels  
Venue, 16 - 40 channels  
6000 and 8000 Series  
and beyond.

# Frank Calvi

**"A lady came into a meeting, looked at me, and left. I'd come from the factory, hairy, ugly, beard, black Tshirt. Since then I've discovered shaving!"**

(from page 1)

theres a big hairy Italian who gives out those cards, and I suggest you don't call back, and these days I don't live at Pinus Ave, anyway".

Frank is possibly the foremost fashion lighting designer in the country now, and wins accolades for his work. Starting at the bottom of the pile, he toured with bands, and slept in saggy bedded roadside doss joints like any keen starter. These days he tours with fashion shows, stays in upmarket hotels, and socialises with the most beautiful models, "like a big brother", he quickly assures.

There's a process in lighting fashion that goes beyond design and careful application. First you have to deal with people, Frank tells of a recent encounter: "a lady came into a planning meeting, having used a different lighting designer, took a look at me, and left. I'd just come down from the factory, hairy, ugly, beard, black T shirt and all. After the show, she took me by the arm and told me she'd written me off as just a hairy rock and roller, and that the lighting was fantastic. Since then I've discovered shaving."

"I've found myself reading the social pages, Mode, Elle, Vouge. I keep up with what the new look is, who's doing what, sometimes it helps in a meeting to say "yes, I know that look", to learn which label is which, where they're at."

"Discussing a new show I see the clothes, hear the music, and talk to the



choreographer. I plan what can be done in the budget, design the rig, explain it to them. The week before the show I see the range, talk to the co-ordinator, get the mood, and plan the feel."

"First I always establish what the budget is, then design base lighting. I like to use 8 Par 64 cans per section of catwalk, from four positions. I pair the cans from position to position, so I have a backup if a lamp fails. I use a cloth, like a diffusion gel in each, and really use intensity".

Most designers tend to use a fresnel spot with a barndoor to contain spill, but Frank really likes the punch from the can, rarely using full intensity. The

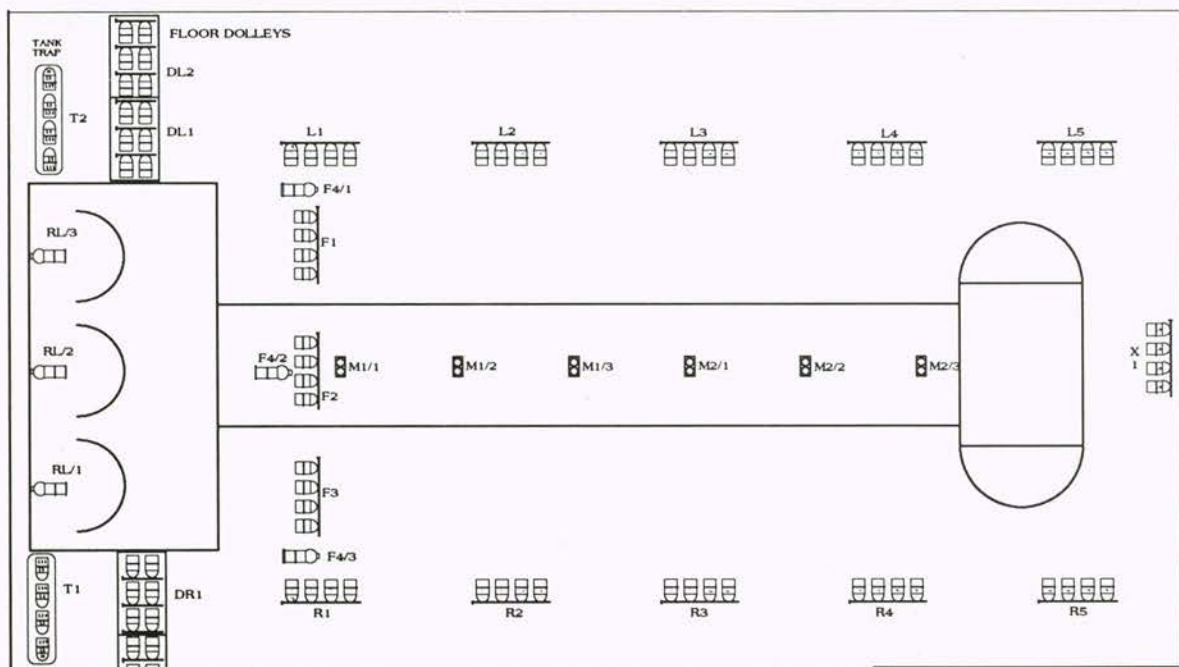
golden rule is "no shadows". Some shows have upwards of 100 cans lighting the catwalk alone. After establishing the product is properly lit, effects are conceived. Number one priority is to present the range properly.

Frank uses Vari\*lites, and not in the usual sense where you go to a rock show and see them cutting through fog, but more as moving projectors. They have timing software built into their operating console allowing movement at the speed Frank chooses. He'll use up to 30 per show, VL 2B and VL 3, which has better colour blending. Soon he hopes to use the VL 4. (See box).

"We discovered a fog machine called the Oil Cracker, which produces a big haze of fog. Previously, fashion didn't like fog, because it used to come out in a big chuff, and have to be hazed up with fans. The cracker just pumps out haze, perfectly."

Just how Frank got into the position he is in, really comes back to plain hard work, but also it helps to stand out in a crowd. Jands Production Services, then known as Samuelsons, had just started doing some work for David Jones when Frank started with them two years ago.

Frank was a freelance lighting person who had done just about everything, especially dance parties. "I hate them. Some designers get paid thousands, put up anything, cant operate".



David Jones SWIMWEAR Parade, '90.

A Frank Calvi design.

Bars left and right are PAR 64's.

Model 1 and Model 2 Vari\*lites above catwalk.

Freelance was the thing to be at the time, Frank had spent a few years as a Lighting Hire Manager (the big Burnout job of the industry). For 13 months Frank worked 2 or 3 days a week on the Ray Martin Show at Channel 9, where L.D. Tom Moore was a good influence. "Tom used to do some zany things, like where some people carefully light and mask off a cyc, Tom would just throw a splash of colour across it, or a gobo out of focus- anything. Chuck it on."

"Jands got me to rig Soundcloud, Aieda, then sent me out on a David Jones parade. D...s decided to tour their parades, a week in each capital, and take production rather than pick it up in each place. The first time we did it they loved it, and now that's the way to go."

Since then word has got around, with Frank lighting the Fashion Industry Awards, Mode Cointreau Wild Ice, Advance Spring fashions, Grace Bros, Robert Burton and more. The guy even lit Santa Claus arriving at D.J.'s! "Heaps of little stuff too. Jands keep me aside for different things, next week I'm lighting a street party."

"Main thing is, keep the vibe. Don't get carried away. The biggest mistake people make is they watch MTV and see all these big lightshows, then go get devoted to a band. It's crazy, who are you loyal too? This is a job, you do the work, get paid and get outa there." Down to earth advice from a down to earth guy.

Vari\*Lite control, the Artisan console.

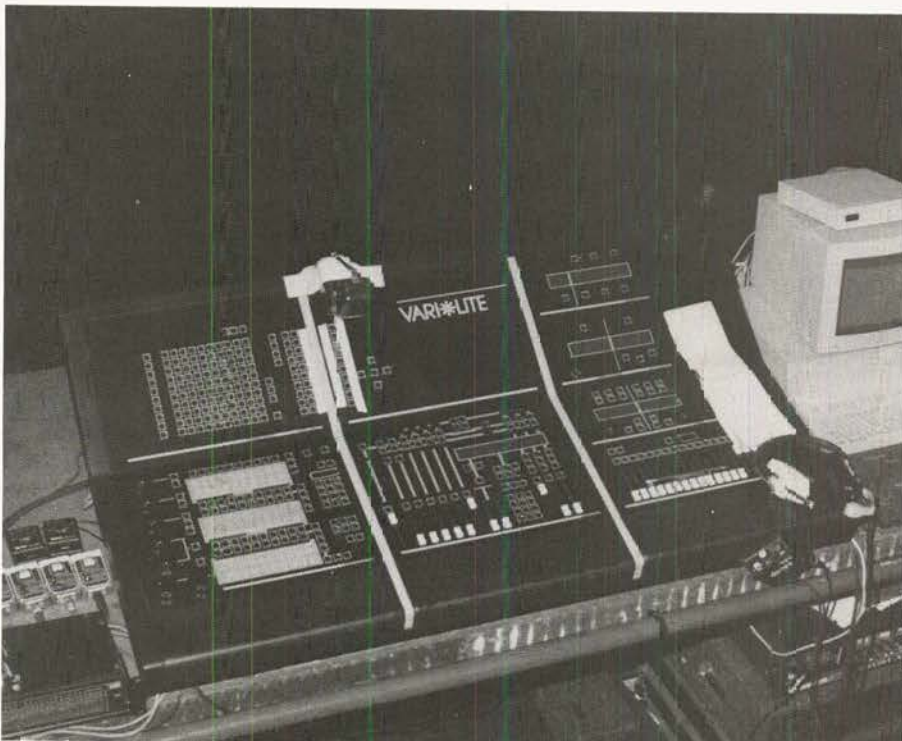
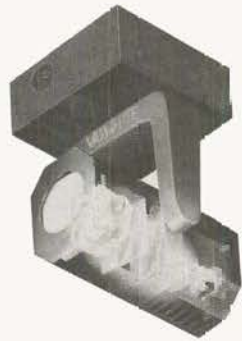
## VL 4 Vari\*lite

The VL 4 Vari\*lite is the latest addition to the Series 200 system, and is relatively small, light, fast and bright.

The pan and tilt speed is as fast as 240 degrees per second - or as slow as .75 degree per second. Beam spread can be as tight as 4 degrees, or wash out to flood.

Light source is 400 watt HTI, and can be colour corrected to 3200 degrees tungsten for T.V. or film. Internally, a new high speed shutter / douser provides instantaneous blackouts, bumps and strobe - like effects in less than 0.1 of a second.

The dichroic colour tuning system has 240 pre-programmed colours, with independent cyan, magenta and amber panel control allowing creation of a custom palette. Colour crossfades can be programmed to last for hours, or snap changed in less than .3 of a second.



## GLOSSARY

### The ABC

- C** Can: Short for Par Can, the standard R & R touring lantern.
- Cans: Headphones
- Cardioid: a heartshaped type of pickup pattern for a microphone.
- Clamp: As in G clamp to attach lights to bars
- Clearcom: Company name, sometimes a generic word for talkback.
- Concert W: A very large W bin, a low frequency speaker cabinet usually housing 2x 15" speakers and weighing 125 kg.
- Compressor: Audio signal modifier that reduces dynamic range of program, automatically controlling sudden large changes. (See also, Limiter.)
- Compression driver: A loudspeaker designed to mate with horn and produce high frequencies.
- Cretin: Theatrical term of endearment.
- Crossover: Audio signal modifier that splits frequencies into sections, ie: lowrange, midrange and high.
- Crosstalk: Leakage of signal between channels on a mixer or tapedeck.
- Cuccold: Olde English term for "someone who's wife runs off with another whilst he is away". Relevant to our industry today.
- Cue: The moment a change or action occurs in a stage show, OR a term used for the headphone monitoring section of a mixer, ie: Cue Bus, Cue Button.
- Curtain: Everyone knows what this is!
- Cyclorama: A backdrop, usually white. Also called Cyc.
- Cyc light: Usually has a specially shaped reflector to spread the beam, lighting the cyc evenly from up close.

Channels PUBLICATION DIRECTORY details the world of specialist magazines, some of which are just indispensable reading! Rated out of 5\*

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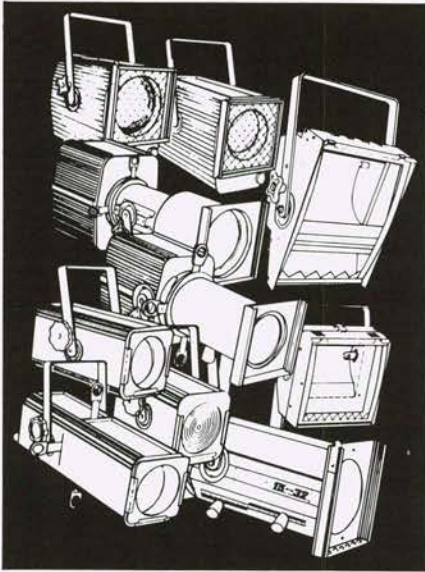
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**APPLAUSE**

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132 Liverpool rd, London 700 0248. Concert promoters bible, Venue reports, Gossip. \*\*\*



**The new** challenge for nightclub and disco lighting designers has to be to design without moving effects, otherwise known sometimes as Kinetic effects. Why do without? Why does Dolly Parton sleep on her back?

This designer is jacked off with the apparent lack of backup service offered by those who import these devices. To illustrate my woes, try this. The devices I bought and installed several years ago were imported by Getlit, who went into a tailspin, only to be rescued by Lightmoves, who went broke ... get the picture?

Lightmoves was then sold to new owners who today operate a successful business known as Lightmoves Technologies Pty Ltd, and these people cannot be held responsible for the activities of those who preceded them.

Meantime, James has nightclub management spewing into his telephone because the Whirllytwirlydat hasn't been fixed, and it broke down six weeks ago, and isn't James a con merchant!

The problem is, the device comes into Oz, the 100% (perhaps we're not being fair, let us say 250%) markup is whacked on, the thing goes up into a roof, works for a while, then stops. The importer might have the parts, but often doesn't. Ask for an exploded view diagram, and listen to the chortle.

James thinks the answer lies in rampant Government protectionism. After all, you wanna sell cars, you gotta have spare parts for the next 7 years.

Another aspect is that the device maybe isn't designed so well in the first place. Those who remember will rue the Rock Industries Space Beacon, a rotating collection of Par 36 pin beams. The wretched things almost always carked out, and to remove the contraption almost always involved

## Bangs and Flashes

## Lite reading

-by James Reid

two people up ladders.

So ... while today's effects lighting importer sits indignantly protesting, perhaps the answer lies with a bit of positive public relations. Why not obtain or draw accurate exploding view diagrams of your products, with clearly labeled parts and part numbers, assemble a realistic spare parts pricelist, and make it known the whole lot is available?

Then the poor sucker in the middle, (me), can see both good intent on the part of the importer, and also just how the rotating collection of nuts and bolts works. I can see if I need to unbolt then thing from the roof to change the bulb, I can get a vague idea of the country of origin. Best of all, I can get a real good idea of the profit the importer is making.

**Why do** Sound people give us LX people so much curry? I started my career after reading Richard Pillbrow's book- (Basic Stage Lighting) - then lighting a Theatrical Play, Bobby Merrick's "The Cake Man", in 1974. There weren't sound people there, as it was an intimate arena environment, with a hushed and expectant audience of about 20. Or maybe a few more, but there were plenty of spare seats.

Later, I encountered the dilemma of sound at a Theatre Restaurant, where the ever so colourful sound contractor instructed me in the workings of the Audio Telex P.A. system. Our contractor had a nick name - Hilda.

Hilda looked at me, along the length

of his nose, and directed my attention be absolute, as the features of this singularly basic piece of audio were drilled into me.

Some time later Hilda was known to have had an affair with a hairdresser called Plasmio, and the story got murky. But, duly initiated !?! James was a sound engineer!

Even later, an associate entered the employ of the Sydney Opera House Trust, and as a sound engineer, duly pointed out the benefits of a change of career. First, he said, Audio people work less than LX people. Oh, not less hours a week, as (read) paid hours, but just generally less.

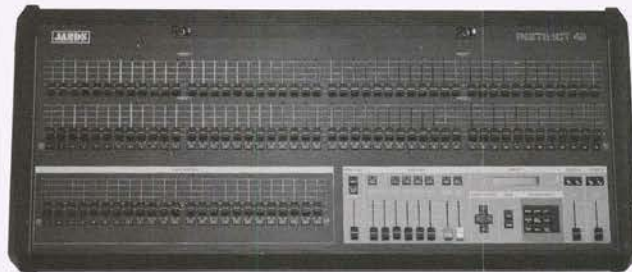
The concept appealed, but at the time I had somehow made the transition from Theatre to Rock and Roll, where hours vs. pay was irrelevant! The event that caused the great shift is etched into my mind.

I'd found part-time work at Strand Hire, where a big hire return occurred one Tuesday. A bus, dusty and aged, arrived. It had just that very minute completed an Arts Council Tour of an obscure play, to about 50 culture starved outback communities.

The driver crawled from the bus, his tongue hanging out, his eyes blood-shot from lack of sleep, his apparel somewhat unwashed. Most prominently, his right arm was wrapped in a dirty bandage, the result of a thorough spraying down by the unrepentant radiator.

If that's Theatre, I'll take Rock and Roll anyway!

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# Great Mistakes

This contribution arrived mysteriously by fax, from Brisbane:

"I remember back in the late '70s working for a very well known LOUD national touring band. I had been the monitor man for several months, when the F.O.H. operator was asked to leave at very short notice. So I finally had my big chance to do front of house.

The P.A. had 4 'W' bins, 8 2x12" cabinets and 8 horns, plenty of power for the Western suburbs hotel which we were doing on this particular night. All was going well, the two support bands had been on and done their thing with no problem, at change over time the D.J. did his thing through his house system as we changed over for the main act. Having done all our line checks we were ready to go.

The band came on with MARSHALL stacks wound up to 11, but there was NO P.A.!!! I quickly checked to make sure I had everything turned on and could see nothing obvious. I called the stage on talkback to check every-

thing was still connected and the amps were turned on, no problems there.

So around to the back of the drive rack I scrambled, which was no easy feat in a room full of drunk punters, to start checking that everything was alright, and to bypass the drive units. The first thing I bypassed was the equaliser, and the moment I plugged the two cannons together the P.A. kicked in at Full Volume.

The first six rows of punters fell over, and the back wall of the hotel fell out. I had inadvertently in my panic left the faders on the desk wide open. Needless to say after that it was back to the monitors for me. But we did end up with a much larger room in which to play, and no body sued me for ear perforation.

A few suggestions:

RULE NUMBER 1: DONT PANIC  
RULE NUMBER 2: TURN FADERS  
DOWN BEFORE FAULT FINDING  
RULE NUMBER 3: CALM DOWN."

Upon reading this tale of woe, your editor recalls his first International Artist, Mr. Gary Glitter, who had a wonderful intro tape, which was a heart beat that built in volume till the drummer started. At a very big gig at the start of the tour, the houselights faded, the tape went on, and .... nothing.

Panic! Darkness, crowd chanting, Editor rushing about like a mad thing, until a good 30 seconds later the realisation that the (new) mixing console had MUTE buttons on the MAIN OUTPUTS! The tape went on, the band came on, and at the end, the Great Man Himself sent for the soundman. "Oy, great idea tha'pause at the start. Bit long, though!"

## SEND IT IN! YES, YOU!

Share your embarrassment! You can use an alias if you really think your professional status is threatened. Mail the confession to:

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