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**DAVID
BOWIE
INTERVIEW:
LIVE FROM
N.Y.**

BAUHAUS



TESTS

E-mu Drumulator
Roland Piano
ADA Time FX
Soundcraftsman EQ
Adamas Elite Guitar
Korg Poly-61 Synth
and more...

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Editorial

DAVID BOWIE's American tour begins this month, and our interview should shed some light on perhaps the most misunderstood rock personality since Ziggy Stardust. Stan Hyman and Vicki Greenleaf sat him down in New York's Market diner, and coaxed him to open up in some surprising ways.

BRAND X, supergroup you may fondly remember, is no more. Happily, the individual members live on, some in the spotlight (Phil Collins), others in relative obscurity (John Goodsall). We'd just been wondering one afternoon here at the office whatever happened to PERCY JONES, the incredible bass player for that ensemble, when lo! We happened upon him right on the street here in Manhattan. We're pleased to have Mr. Jones with us as a columnist, and his first offering, "Going Fretless", is hopefully just the beginning of a long association with *IM&RW*.

From our U.K. correspondents comes an interview with BAUHAUS, a British cult band beginning to receive acclaim and acceptance here in the States, and closer to home, we have an update on the EDDIE VAN HALEN/KRAMER GUITARS/IM&RW Guitar Giveaway.

Mike Shea continues his Recording Session Procedures series, and we have reviews of lots of goodies, including the Drumulator, a digital drum device for under \$1000.00, an EQ/Spectrum Analyzer from Soundcraftsmen, the Korg Poly-61 synth, a Time-Delay FX unit from ADA, and a host of others.

Enjoy.

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ROAD TEST THE BEST!

SHIFT INTO SUZUKI FOR PEAK PERFORMANCE!



EELECTRIKS PREMIUM POWER CABLES

Before you hit the road this summer, check out the starting lineup of new products by Suzuki. Don't leave home without first stocking up on EELECTRIKS, the thickest, meatiest cords & cables you've ever seen. Standard accessories include 3/8" thick double shielded cable, solid brass military plugs and our exclusive "Powereyes" see-through plexiglass viewing window. Now you can spot trouble a mile away before you blow a fuse. Put yourself in control with visual dependability and a lifetime guarantee!



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Can't we still be friends?

Dear Editor,

I have been getting *IM&RW* for about two years now and it is a fine publication. However, I have noticed that the concentration has shifted more towards equipment instead of music and musicians. Indeed, the page borders read "The Complete Equipment Magazine" where they used to read "The Complete Music Magazine." This is not a complaint really, because I realize the labyrinths of recording and engineering, and have friends who appreciate your comprehensive study of the necessary gear involved.

However, I myself am a musician who plays an

acoustic instrument. I do not foresee becoming an electronic musician. How much of a call is there for electronic clarinet?

Primarily, for *IM&RW's* shift in focus (and my lack of appreciation for it), I do *not* wish to renew my subscription.

I have enjoyed *IM&RW*, particularly the interviews with people like Lou Reed and Brian May, who don't grant interviews to many magazines. I have such a backlog of issues and articles that I have not yet read, that trying to catch up will probably keep me amused for another two years.

Marie McLaughlin
Linwood, NJ

Return to sender

Dear Editor,

I saw an advertisement in the October issue of *IM&RW* for the Rhodes/Chroma synthesizer. There was no address to acquire information, so I am asking you to send me the address so I can get the specifications and more details. Your co-operation would be greatly appreciated.

Jeffrey M. Watkins
No address given

(Ed. Reply: The address is Fender/Rogers/Rhodes, 1300 E. Valencia Dr., Fullerton, CA 92631, tel: (714) 879-8080. Next time, Jeff, you might try including your own address.)

Who can I Turner to?

Dear Editor,

I recently bought a copy of *IM&RW*, Oct. 1982, and am enjoying it greatly. Your

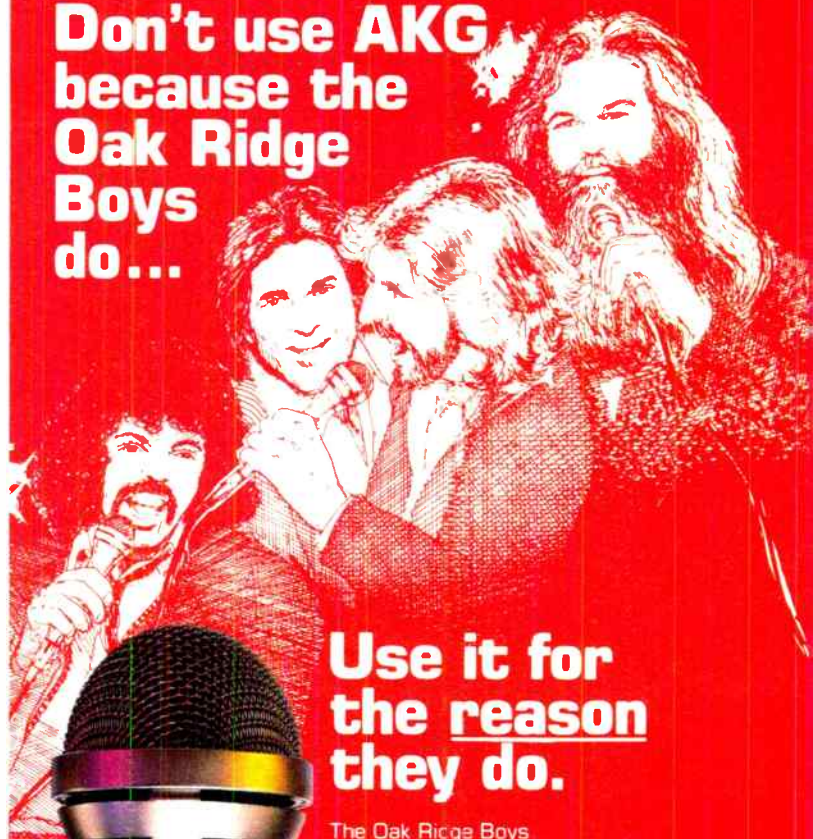
interview with Lindsey Buckingham was excellent and I was wondering if you could possibly give me the address of Turner Guitars, which are the type Lindsey uses. I saw Fleetwood Mac in concert recently, and was very impressed with the sound of Lindsey's guitars. I'd like to get more information on Turner instruments.

Thanks, and keep up the good work.

Charles M. Schubert
Englewood, CO

(Ed. Reply: We tried our best, Charlie — Turner used to be located at 24 E. Commercial Blvd., Ignacio, CA 94947, tel: (415) 883-3571. Upon calling to verify, we found that the number had been changed to (707) 778-4841. When we attempted to reach this new number, we were informed that it had been disconnected with no referral number. Some days you just can't win...)

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The Oak Ridge Boys. From Country to Country/Rock, their distinctive four part harmonies have made them one of the premiere vocal groups in the world of music.

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INTERNATIONAL MUSICIAN & RECORDING WORLD

Reader Survey

We want to know what you're thinking about. In particular, we want you to tell us what we can do to be more effective and helpful to you—what type of articles, features, and columns you'd like to see added (or deleted)—or anything else you think we ought to know. Please do us (and indirectly, yourself) a big favor, and fill out the following survey, returning the completed form to **INTERNATIONAL MUSICIAN & RECORDING WORLD**, 12 West 32nd Street, New York, N.Y. 10001.

The completed surveys will be entered in a prize drawing, and five (5) lucky winners will receive a **FREE LIFETIME SUBSCRIPTION TO IM&RW**, as well as complimentary copies of the **IM&RW 1983 EQUIPMENT TEST GUIDE!!!** So, be certain to include your full name and address, as well as a daytime phone number, so that you won't miss out on this hot offer.

1. AGE _____ 2. SEX _____

3. INSTRUMENT YOU PLAY (list more than one if necessary) _____

4. What are the types of articles you enjoy reading most in IM&RW? (list five)

5. Do you consult IM&RW to learn about new types of equipment? _____

6. Do you consult IM&RW *before* you go to the musical instrument or pro-audio dealer to check out gear? _____

7. Have IM&RW's equipment tests and product reviews influenced your buying decisions? (Check one:)

_____ Not at all. _____ Strongly.
_____ Slightly. _____ Very Strongly.

8. Please name other musical instruments or music magazines you regularly read or subscribe to: _____

9. What, in your opinion, sets IM&RW apart from these other magazines?

10. Do any of these magazines provide as much or more product information as IM&RW? _____

11. Name some feature ideas, or ideas for regular columns which you would like to see in IM&RW: _____

12. Check from the list below those features or departments you would like to see dropped or changed in some way from IM&RW.

Product News _____	Transcriptions _____
On Sax _____	A Good Hard Listen _____
Guitar Talk _____	On Trumpet _____
On Bass _____	Computer Synthesis Explained _____
Drum Clinic _____	"On Test" Articles _____
Letters _____	

Why or How? _____

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Musicians want precision in their sound. It's now available at selected MXR Musical Products dealers: the new Series 2000.

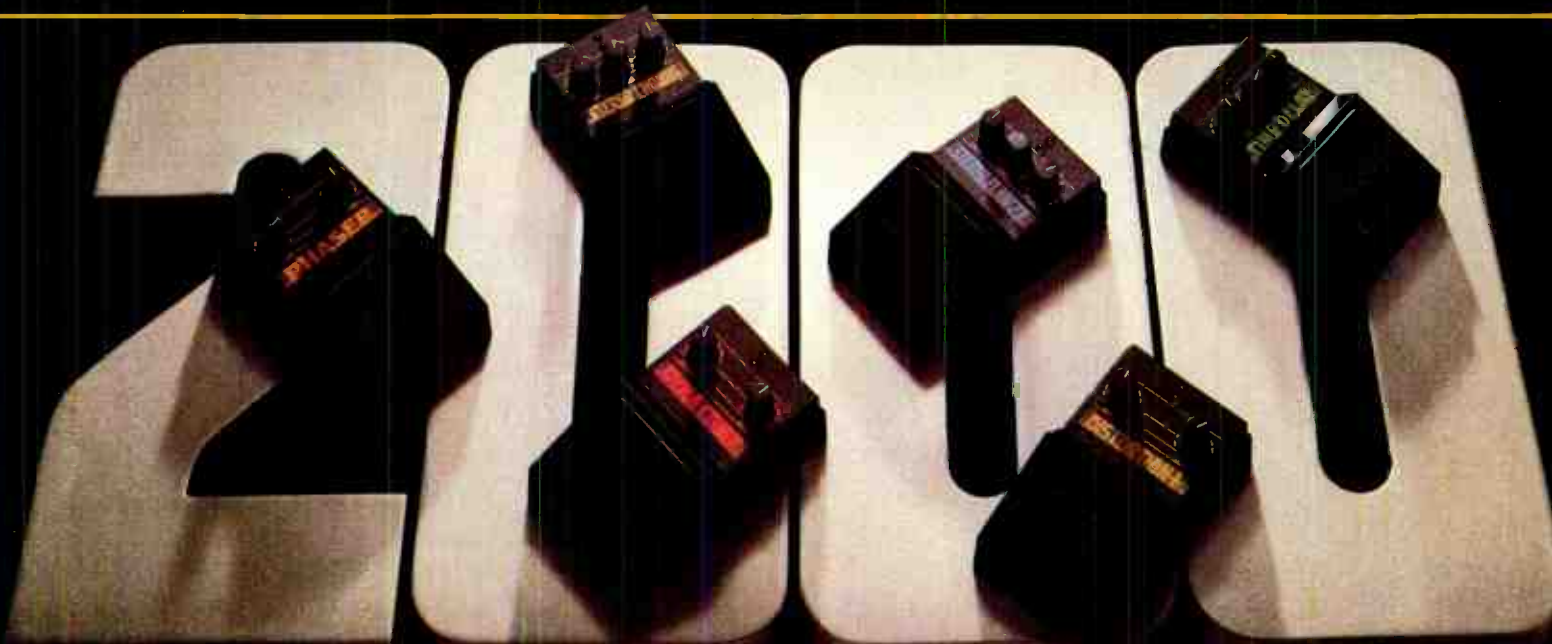
■ New Distortion + , Dyna Comp, Phaser, Stereo

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- **Compu Magic Accompaniment**—A Korg Exclusive! Plays rhythm and changes chord progressions automatically while you play the melody.

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Product News

PRO SOUND Powered Mixer

Toa's new MX-106 is a 6-input, self-powered mixer with plenty of juice. Its built-in power amp puts out 300 watts RMS @ 2 ohms, and it features as well a built-in electronic analog echo unit, a 9-band graphic Eq,

design to the 4 and 5 string basses, and comes with two active, low-impedance EMG/Overlend pickups. Controls are kept simple — volume, tone, and 3-way toggle selector. The double-ball end strings which the guitar uses are being manufactured by Superwoand and LaBella (the guitar comes with a set), though

simultaneously. The MM12 features 12 input channels with built-in RFI filters and 3-way Eq with +12dB boost cut, and 6 output channels, as well as a high output headphone amplifier for monitoring each output mix, and a host of other features.

For info, contact Rane Corp., 6510 216th SW, Mountlake Terrace, WA 98043, (206) 774-7309.

Digital Nakamichi

The DMP-100 Digital Mastering Processor is Nakamichi's entry into the affordably-priced digital processor field pioneered by Sony, dbx, JVC and other manufacturers. The DMP-100 offers a choice of 14- or 15-bit quantization and is compatible with any home VCR transport. With 16-bit quantization, the DMP-100 yields a dynamic range of 92dB and distortion less than 0.005%. Suggested retail price is



300 watts
of Toa

'Auto-Comp' compression circuitry, fluorescent bar graph metering, and other sophisticated features. Contact Toa for details at 480 Carlton Court, South San Francisco, CA 94080, (403) 489-5511.

GUITARS One guitar burger, hold the headstock

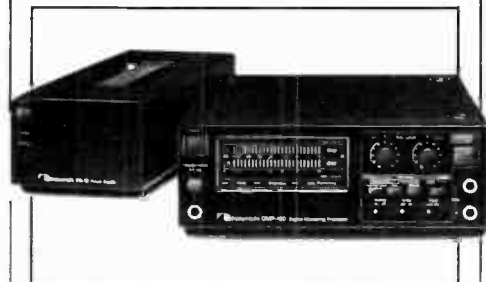
Finally, the Steinberger Guitar is here. Unveiled at the June NAMM Expo in Chicago, the 6 string electric is, as expected, quite similar in

conventional strings may be used as well.

Contact Steinberger for info at 475 Oakland Ave., Staten Island, NY 10310, (212) 447-7500.

PRO SOUND Let it Rane

Rane's MM12 monitor mixer is a compact, cost-effective unit designed especially for use in small club situations. Its simplified layout was set-up with the lone soundman in mind, who must operate both the main desk and the monitor mixer



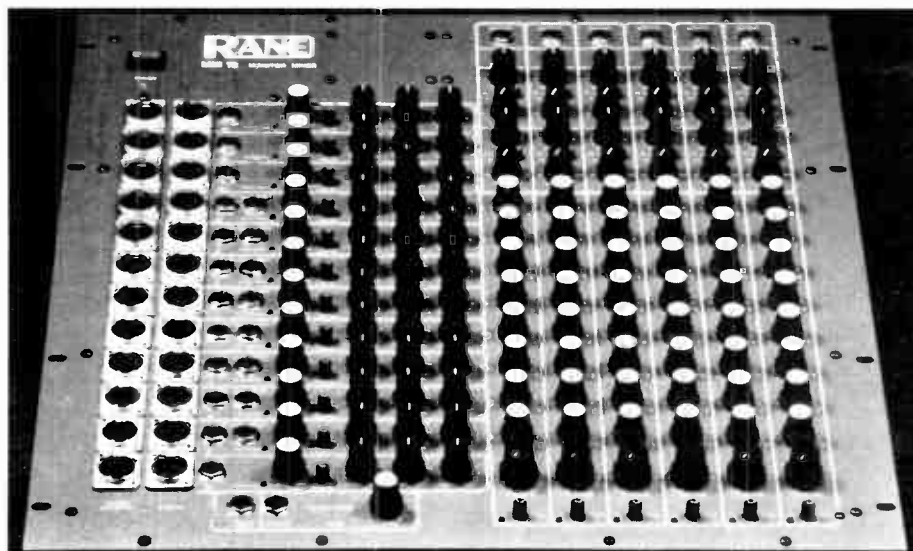
Nakamichi Digital Mastering
Processor

about \$1,990.00, and complete details on the operation of the DMP-100 may be obtained from Nakamichi, 1101 Colorado Ave., Santa Monica, CA 90401, (213) 451-5901.

Continued...



A six-string burger



A unit of Rane

Product News

...Continued

New Community

The VB790 is a low-frequency vented horn system molded from one piece of hand-laid, balsa-reinforced fiberglass. The system comes with either a 15" or 18" loudspeaker, and may be purchased in kit form as well (no enclosure). The 15" version lists for \$738.00, while the 18" version intended for subwoofer applications lists for \$848.00. Contact Community Light & Sound at 333 E. Fifth St., Chester, PA 19013, (215) 876-3400.

NAMM Equipment Special

A look at just a few of the goodies on hand at the Summer NAMM Expo in Chicago.

GUITAR

More on the Roadstar

Ibanez introduced the Roadstar Series at the Winter NAMM expo California, and has now announced a bass model to complement the



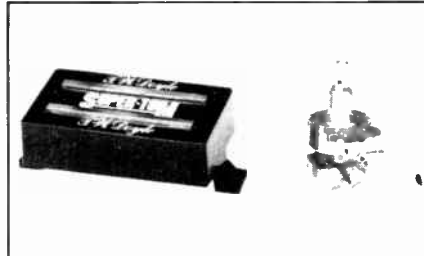
One for the road

guitars in the line. The RB600 features a medium-scale 32" maple neck set into a solid ash body. All hardware is by Ibanez, and the bass comes with one 'Super P4' single-coil pickup.

Contact Ibanez for details at PO Box 886, Bensalem, PA 19020, (215) 638-8670.

New from Doyle

T.W. Doyle's newest pickup is the SuperTom, a high impedance output humbucking-type pickup that is primarily designed for music requiring broader frequency ranges than usual.



Supersound, Super Tom

The pickup can be used either by itself, or in conjunction with Doyle's D-1 guitar pickup 'system', which comes with a 6-position toggle selector, offering six distinct tonal variations.

Suggested list price is \$99.95 for the pickup alone, and \$260.00 for the complete SuperTom System. Contact T.W. Doyle at PO Box 517, Westwood, NJ 07675, (201) 664-3697.

New Martin pickup

Martin has introduced a new acoustic guitar pickup, the Thinline 332, which was developed as a joint project between Martin and Barcus-Berry.

The pickup is said to deliver the



A slimline Martin

finest reproduction and tonal response of any Martin acoustic electric system ever. It may be factory installed on any model Martin acoustic guitars. Contact them for info at 510 Sycamore St., Nazareth, PA 18064, (215) 759-2837.

Stainless Steel Roundwounds

Fender has introduced stainless steel roundwound strings for bass and guitar, each available in four different gauges. Stainless steel was the material of choice due to its longevity, durability, and resistance to humidity, skin oils, and other string killers.

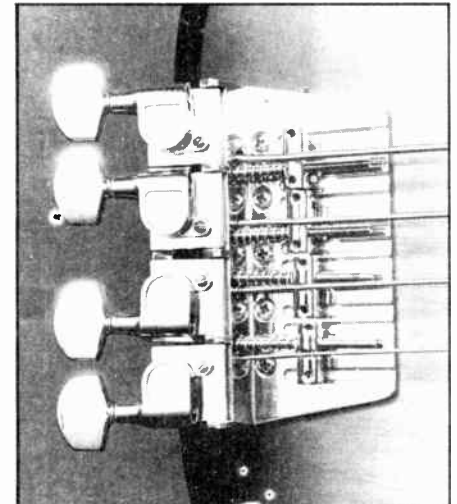
Contact Fender at 1300 E. Valencia Dr., Fullerton, CA 92634, (714) 879-8080.



Stainless steel strings

Calamari from Soundborn

The Octopus, as some of you may already know, is a conversion kit from Soundborn Research which allows you to turn your standard 4 string bass into an 8 string. The bridge uses 4 Schaller M6 Mini tuning keys which react upon the four



Soundborn squid

Continued...

TOUGH CHOICE.



At some point you'll realize that you're ready for something better, something truly professional. That old sound system doesn't do it anymore, and you need something with increased acoustic output, low distortion, high power handling, ultimate reliability, and extreme ruggedness.

In other words, you're ready for Cerwin-Vega.

When you decide to make your move, though, you might find that the choices can be tough. Especially when you're confronted with the most complete line of professional audio systems available.

We make 10 vocal reinforcement systems alone, including the highly popular V-29, V-30X and V-31X. These systems incorporate a new family of compression drivers based on advanced diaphragm and voice coil technologies to deliver maximum acoustic output, high intelligibility, and resistance to heat and fatigue.

Of course they employ Cerwin-Vega 15" woofers—an industry legend for thunderous bass response and reliability.

They also feature the toughest cabinet construc-

tion around. Each cabinet is built out of seven ply high grade plywood and covered with rugged nylon indoor/outdoor carpet (Ever notice how other pro equipment manufacturers are starting to use this covering? We have. We were the original.) That adds up to a virtually indestructible enclosure.

As if performance and ruggedness weren't enough, when you choose one of our vocal reinforcement speakers you have the additional satisfaction of knowing it's completely expandable. So when you're ready to move into larger performing areas you have a choice from eight add-on systems for low and high frequency reinforcement.

Which Cerwin-Vega system to choose? That'll take some thought on your part and a visit to your local C-V dealer to decide. But whichever system you choose you can be assured of one thing: with Cerwin-Vega you always come up a winner.

SOUNDS TOUGH? YOU BET IT IS!

Cerwin-Vega!

Cerwin-Vega Inc. 12250 Montague St., Arleta, Ca. 91331
(213) 896-0777 Telex No. 662250

Product News

...Continued



Humbuckers from Washburn

additional strings from the bridge position.

Now, Soundborn has a new conversion kit available, the Intraquad, which enables you to convert any standard 4 string bass to a headless bass with four bridge mounted Schaller M6 tuning machines. For information on the two conversion kits, as well as pre-made headless necks designed to work with the Intraquad System, contact Soundborn Research, 4001 Falls Rd., Baltimore, MD 21211, (301) 323-0748.

Two new Washburns

Washburn has two new solid-bodies, one with tremolo, that make use of what they call a "vertical humbucking system", which is apparently a stacked double coil that delivers single coil tonal characteristics when tapped by a push-pull volume pot. The reverse mode, of course, offers humbucking sound and characteristics. Bodies on both instruments are alder, and the bolt on necks are maple. Both the G-30VTS and G-30VCA carry a

suggested list price of \$699. For info contact Fretted Industries, 1415 Waukegan Rd., Northbrook, IL 60062, (312) 498-3510.

O'Hagan Laser

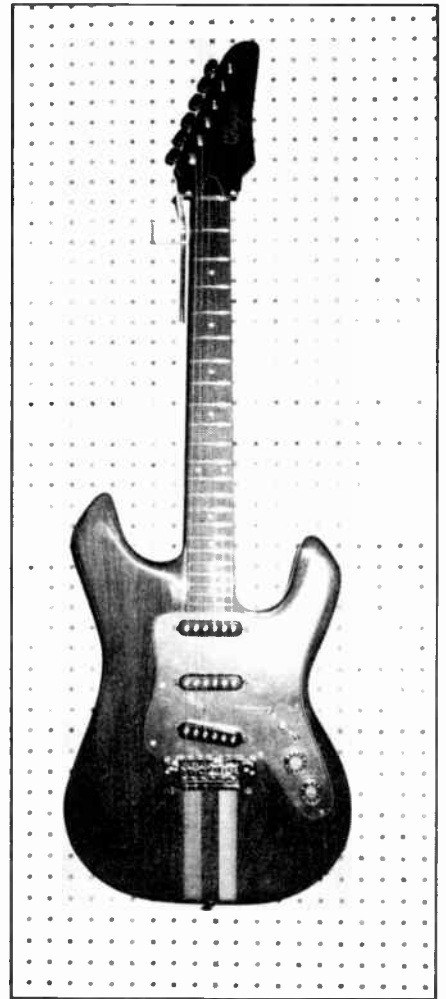
The Laser is O'Hagan Guitars' first single coil model, and it features 3 Schaller pickups, Schaller bridge (either in gold or chrome), and Schaller mini machines. The body is either maple or walnut with a set-through neck. Tremolo is optional.

Contact Jemar Corp., 2901 4th St. S.E., Minneapolis, MN 55414, (612) 920-2270.

Epiphone USA Series has new name

Gibson Guitars has recently let us know that, in a not completely unexpected marketing move, the Epiphone USA Series of low to mid-priced guitars will now be produced under the Gibson logo only. The reason for the switch is that since the Epiphones are built in the Gibson plant and backed by the Gibson warranty, they should be included as

part of the standard Gibson line, thus letting players who are short on the cash required for a Les Paul still own a Gibson guitar. It may sound like a matter of semantics, but this isn't the first time an instrument manufacturer has adopted this type of marketing position, by any means. For more details on the new, more moderately priced Gibsons, contact them at PO Box 100087, Nashville, TN 37210, (615) 366-2400.



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The latest from Dean Guitars is the Bel Aire, a double cutaway solid-body with a maple neck, optional rosewood fingerboard (no extra charge), 2 single coil pickups and 1 humbucking pickup, a 5-position selector switch, and tremolo unit. The Bel Aire lists for \$799, and is offered in a choice of 13 finishes. Contact Dean Guitars, 6417 N. Ravenswood Ave., Chicago, IL 60626, (312) 743-6115.

Continued on page 51



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Ian Anderson

Ian Anderson is Jethro Tull. Literally and figuratively he has been both captain and navigator for Tull since its conception in the late '60s. Over the course of the years Jethro Tull's music has received the highest of praise to the most critical of drubbings. Honest and outspoken without reservation, Anderson proved to be no less revealing given a good hard listen:

1. Roland Kirk (flute) — “Serenade to a Cuckoo” from the album *I Talk With The Spirits*. (Limelight Records LS 860008.)

IA: That's actually the first time I've heard that song since I was 17. That album and that piece was the first flute music that I ever heard that struck my ears as being different than using the flute as a classical or orchestral instrument. Years later, when I was tempted to learn the flute, that was the tune that stuck in my mind. As I had no lessons or fingering charts, I had to find out for myself how the instrument worked. This was a simple tune to learn as a first piece. It was easier for me to blow and sing at the same time because I couldn't really make a pure sound. It became one of the stage pieces in the early days of Jethro Tull. Hearing it again is quite interesting because the crudeness of the sound is what is so attractive about it. On a personal level I would rate this very highly. Five stars, the highest. It's gloriously free from a lot of the cliches I heard in a lot of the lightweight Jazz of the time. He was very brave to play something quite as simple as that with such a primitive sound. Roland Kirk was a primitive jazz musician. Not in the sense that he didn't understand melody and harmony, but in his style. It's similar to Charlie Parker in his day, in as much as it didn't matter if the instrument squeaked. The odd wrong note was permissible provided the flow was right. I go along with that kind of music. This is a good example of Roland Kirk at his simplest and in a sense his best.

2. “Sonata in A Minor for Flute and Guitar Op. 1, No. 1.” Allegro movement. From the album *Music for Flute and Guitar: An 18th Century Serenade*. (Jean Pierre Rampal flute,



... Continued

Rene Bartoli guitar.

IA: I have absolutely no idea who's playing although the guitarist is sufficiently out of time so that it could be John Williams. The flute playing is sufficiently stumbling and breathy. It certainly can't be James Galway. The style was quaint Englishy kind of music. If you're in the mood it's nice stuff. If you were at my home right now it would be cooling down for the evening and you'd be sitting beside 16 century beams and a quiet lawn. It would be nice to hear this music echoing through. It would seem absolutely natural if you were in that environment. Needless to say, I don't play that sort of music at home. I don't play any music at home other than what's on the top 40 radio. This is fun but it's not what fires me musically. I don't feel terrifically involved with that sort of thing, although I can see how you might think that this is terribly meaningful to me. What stirs me is the howling sounds of the bagpipes and a single drummer on a castle wall. If you're looking for the Folk memory, that's what moves me. It's not that rather quaint formalized court music of whatever period that is from.

3. "Wildest Dream" from the Asia album. (Geffen Records GHS2008.)

IA: I thought you'd probably play some of that. I'm sorry for bursting out laughing but I didn't recognize the opening bit. It sounded like early Yes, but when are they going to get to the idea? The simple rhythmically punctuating thing sounds circa middle 70s, but I can't remember it being quite as bad as this. As soon as I heard John Wetton I knew who it was. On the positive side, no-one is more surprised than me that this album is as big as it is. The good things about it all come from John Wetton. I've never been a big fan of Carl Palmer. He's got a lot of technique but it doesn't take him that far. Just before they did this album Carl rang me up looking for a job. I guess he was ringing up everybody looking for a job, because he was as far out of it as he could possibly be. It only happens that John Wetton was also out of it, having done a disastrous solo album after leaving U.K.

JS: What about this particular song?
IA: It's amusing and it does all sound a little corny to me. I guess what I do probably sounds corny to other people too. John sings well on this but I'm not greatly enamoured with the lyrics.

JS: How many stars would you give it?

IA: The track? The album? The group?

JS: Anything you like.

IA: In the final analysis I've got to give them a lot of credit for making it. I say best of luck to them because I was a disbeliever. The track itself has got a very nice little harmonic twist around the point when they sing "Wildest Dreams." A lot of the ensemble playing sounds kind of phony in the light of what people are doing today. There are a lot of things that are grabbed at. The band is very careful to play with Carl Palmer. Sometimes Carl has a problem with keeping the old metronome going and he is a bit erratic. But they stayed with him and made the best of it. I'd give it 3½ stars but don't expect me to listen to the whole thing without snickering.

4. "And I Moved" by Pete Townsend from the solo album Empty Glass (Atco SD 32-100).

IA: That was Pete Townsend. I like Simon Phillips playing the drums. I don't know the track. I've heard this album recently otherwise I would never have known who it was. These guys are too anonymous sounding. His own performance seems to be watered down by having a bit of a bland band behind him. He should have played all the instruments himself. Pete Townsend is one of those rather disturbed confused guys that keeps doing it. He keeps hanging in and having another go. I owe a lot to Pete Townsend and the Who. They are one of the three best Rock groups of all time.

JS: Who are the other two?

IA: The Rolling Stones, the Who and Led Zeppelin would be my three favorite Rock bands. They are the classics.

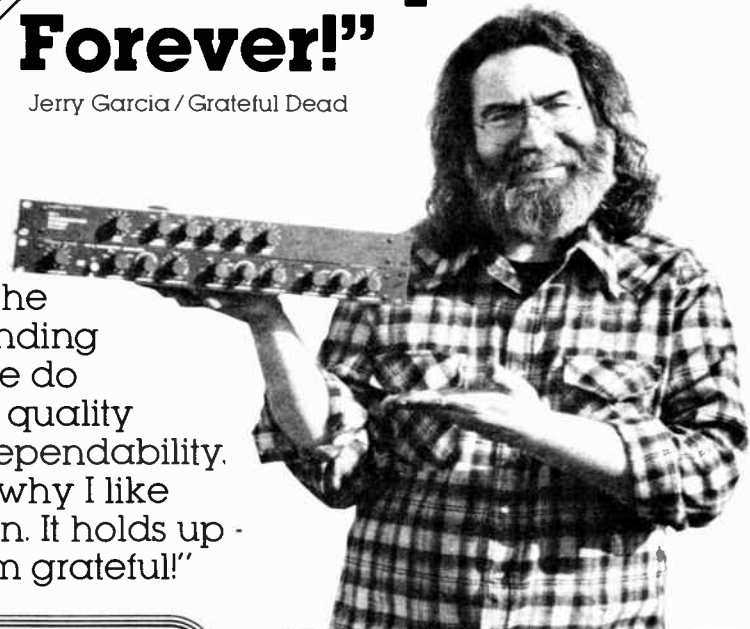
5. "Peaches III" from Frank Zappa's Tinseltown Rebellion album (Barking Pumpkin Records CBS88516.)

IA: That's Frank Zappa. He is one of two people who are really meaningful and totally original in the sense that they are 100% American artists. The other artist is Captain Beefheart. They are untainted by the British groups. *Over Nite Sensation* was the best album he's done. The songs are really songs. I also think Frank got braver with his singing. The only other problem I have with Zappa is that he's afraid to ever get serious. He's terribly afraid of being honest and ever saying anything from the heart. He waves his comedy like a shield.


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John Stix



With his acting career taking a temporary back seat, Bowie is once again ready to dance into action with the 'Serious Moonlight' tour.

On *Let's Dance* you worked with an entirely different crew of musicians than the ones you worked with in the past. Are you pleased with the results?

"Yeah, tremendously. I worked with Nile Rodgers from Chic and a number of his friends. When I started off, I decided that I wanted to work with people whom I never worked with before; I didn't work with Carlos Alomar or Dennis Davis or the band I usually work with. It's been two years since we all worked together and everybody's kind of gone their separate ways; Dennis plays mainly with Stevie Wonder now. So I thought, 'Well, if the band is going to change anyway I might as well start off with a whole new band this year'. They're terrific and I'm quite happy."

But, weren't you nervous about finding a chemistry that would work as well as the one you had with your band?

"Yeah, very. But that's what made it exciting — not knowing. They didn't know what I wanted and I didn't really know how they'd respond to my ideas. I think it's a good idea to dive into the deep end musically if you're getting too complacent about things."

*Can you describe where *Let's Dance* "fits in" among the rest of your work?*

"I guess the nearest thing is that it displays the same exuberance as *Young Americans*. It's the most up album I've made in a long time. I think it also turned out to be a simple album because we all wanted to find an immediate common ground. So it didn't become too indulgent or too experimental. I'm happy to have done an up album after such a long time — well, it's relatively up compared to a lot of my stuff" (laughs).

*Is the "up" on *Let's Dance* a reflection of how you feel about everything that's going on in your life now?*

Continued...

SERIOUS MOONLIGHTING

... Continued

"No. Never. I've always painted an entirely fantastic — in the dictionary definition of the word — picture of my albums; the albums always being for me the definition of an alternative world. I've come to learn that anything you do is only as good as the feeling it leaves you with a couple of years later. So I'm never immediately excited about anything. It's often hard to be objective about any work in the same time space that you're doing it in."

When you look back, what albums of yours are you excited about?

"There are two that really matter to me and a bit of a third. I think *Diamond Dogs* because of the atmosphere and the use of synthesizers. I think the album plays better today than it did then. I feel proud of it in terms that it really was 1980s music in 1970. The atmosphere on that is so... it was a musical prophecy; the use of cut up lyrics, the baroque way of working and the use of synthesizer not to reproduce other instruments, but to create an atmosphere that has now become such a total part of new music. That one was very important

to me. It's also an album that never fails to create the same atmosphere that I got from it when I first made it. Some of the others don't have quite the same strength of character. That album and *Low* equally as well, because it was a lovely experience for me to again try to redefine our music at the time. Also parts of *Young Americans* I felt were just a terrific combination of cultural pluralism (laughs). I think that's the way of defining it. It was lovely to try and produce that kind of hybrid music: half funk and half European. The two attitudes came together and it was very interesting."

*You classify *Diamond Dogs* and *Low* as your two favorite albums out of all of your work. On *Diamond Dogs* you ventured to take almost complete instrumental responsibility: more than you ever had previously and on *Low* you were experimenting with the subconscious writing of music and other unique forms of musical expression. Was it hard to find other musicians that supported your avant-garde thinking?*

"Absolutely. It's very easy to explain. I always felt very nervous about asking musicians to play the kinds of things I wanted them to play. There came a point when I said, 'God, I can't ask him to play that, he'll think I'm a damned fool.'

And that's always sort of inhibited me. So, when it got to that point, especially on *Diamond Dogs* when it came to some of my ideas on how you should use synthesizers in particular; nobody was trying to make them sound like a synthesizer — I didn't want to tell a synthesizer player to do that, so I started doing it myself. Also the horn parts — the saxophone parts — because I do play saxophone. I would have much rather played them myself on that particular album, because I didn't want to have to tell the sax players, 'No, I don't want you to play in tune. I want you to be a half note flat.' (laughs). I just didn't want to tell musicians how to play and play wrong things. I was too embarrassed."

But they weren't "wrong". A lot of those directives have become established concepts in contemporary music.

"They subsequently proved to be a particular direction in music, so I felt a lot safer. Then I built up a lot of confidence in the bands that I had: Carlos Alomar, Dennis Davis, George Murray and those guys. We started again on a very communal basis with *Young Americans* and that again was a meeting point. It was a confidence building time between us. It was a wariness that became a very strong musical bond, but it possibly got to a point — I don't know, I wouldn't want to be presumptuous — but I imagine it may have gotten predictable and that's when one has to start all over again. So, you start working with new musicians. There's a point when I can predict how they'll interpret one of my ideas and



that's when the fun goes. Because I like to throw things out to people and see what they're going to do without knowing in advance. Because when you know in advance, you start writing in a particular way. That's okay, but some of the friction goes."

Is that why the split came with long-time guitarist Mick Ronson?

"It was really simple with Mick. I admire Mick's guitar playing very much, but I feel that Mick was not as open to new kinds of music as he possibly could have been. He had a particular point of view about the guitar which was absolutely unshakable and I couldn't work within those confines. I wanted to set much wider parameters."

How did you come to choose Nile Rodgers as your producer?

"I've just always adored his basslines and the drum and bass togetherness he's had on all the records he's been responsible for with Bernard Edwards. And I like Nile. I met him at a club one night a couple of years ago and I've been really gung ho. We both had exactly the same response to rhythm and blues. That's another aspect that's come up very strongly on this album. When I was playing saxophone, I was playing mostly R&B bands. Nile's rhythms are rhythm and blues, as well. I've never gone back as strongly to rhythm and blues as I have on this album."

And what do the new musicians you worked with add to your sound?

"All the musicians on it — not by calculations, but by the fact that they are friends of Nile Rodgers more than anything else — have turned out that it's more-or-less a Latin band. And that's given it a certain lightheartedness that I think otherwise it might not have had. So, if there's anything (outstanding) about it, there's a human rhythm in there that is happy and an over-riding positive feeling that I've not had before. There's a charming feeling about it."



SERIOUS MOONLIGHTING

SERIOUS MOONLIGHTING

Any musician in particular who "knocked you out"?

"I think the guitarist on this album is absolutely dynamite. His name is Stevie Ray Vaughan and he comes from Austin, Texas. He plays like Al King all the way down the line. I saw him working at a jazz festival in Switzerland a couple of years ago and I couldn't believe it. I hadn't seen anybody like that since I saw one of the Kings — and I think it was probably Albert. There's probably a bit of all the Kings in his playing: Bebe, Freddy and Albert."

Do you think this is a part of David Bowie that no one has ever heard before or even anticipated?

"I don't think anyone would have expected quite such a positive outlook from me. I never felt that I was a good-time person."

Why not?

"I'm quite a serious person. I never felt I was the life and soul of parties or anything. I thought, 'Well, let's not try and fight that on an album.' There's no point in me trying to go out and make happy stomping music. It's not really my thing. But this occasion of working with new people and wanting to be happy with them and wanting them to have a good time working with me produced this very happy atmosphere without even really realizing I was going to end up with it."

Do you still have new ideas that you want to put out or have you finally found a plane that's comfortable for David Bowie?

"Well, I guess we've gone full circle and that brings us back to the new album. The one thing I can tell you about is that it is completely without synthesizer. There is NO synthesizer on it. It's just that, to me, the way the synthesizer is being handled, it's begun to represent a new high techno society. I didn't want that kind of atmosphere, so I took it right off the album. I tried to make a more personalized statement."

But are you still an experimentalist?

"Yeah, I think this album certainly has experimental aspects, but I don't think it's as overwhelming as some of my previous things. I think the reason that it isn't so overwhelming

is because I didn't want to scare off these new musicians. I actually had impulses to... but thought, 'Oh God, I really want to be very careful here because all these are new guys I've never worked with before'. Everybody in the studio, even the technicians were different. I'd never worked with anybody and I really felt on my own again. I felt we should just find common ground where I felt happy and where they felt happy. So, rather than a compromise, I think it was a question of finding a vocabulary that we both understood. And for me, that was a very successful thing to do; an encouraging thing to do. Where you can musically meet and feel happy with each other. It didn't start out to be an experiment, but to become friends musically and this is how it sounds. It's more of that statement than this is a brave new world and here's my icy statement that will again predict something tantamount turning to catastrophe for the world

"I've never gone back as strongly to Rhythm and Blues as I have on this album"



in the next few years".

In the late '70s your involvement in music seemed to decrease while your participation in film expanded greatly. What triggered that move?

"Toward the end of '75 I had a complete, catastrophic emotional breakdown. Drugs had an awful lot to do with it — almost 100 percent — and trying to live a rock 'n' roll life that I wasn't cut out to do. Fortunately, I had friends around me who got me out of America and rock 'n' roll. A rock 'n' roll life is so self-serving. It took me a long time to get over. I should have been hospitalized, but I didn't want to get the stigma of going into a mental hospital. Because I had such a bad time in rock 'n' roll I thought that maybe I should get involved in one other side of the arts; maybe I should move into films".

How did you go about piecing your life back together?

"I went to Berlin to find an environment unlike California. It seemed foreign and alien to anything that I'd been through. It was rough and tough and it wasn't a sweet life. I got to know very good people there; not just the musicians, but some poets and fairly heavy left-wing people who were living there at the time. They were highly critical of the society they were living in and were highly critical of people like me. After I started to get well again, I realized that I wanted to recapture what I wanted to do when I first started writing music. But I also wanted to capture that freshness in acting and directing".

How did you decide you were ready to return to your work?

"It was no immediate decision. It came very slowly in fact. At the end of the three years, I found that I was capable of doing a lot of things again. I didn't need to live in Berlin anymore but I didn't need to run back to the womb of self-enlightenment either — New York, London and Los Angeles. My life is really quite a simple affair now".

You're starring in two movies, Merry Christmas Mr. Lawrence and The Hunger. In the latter, you portray a vampire doomed to die after 300 years of ageless existence. We understand that you had to go through a painful ageing process on the set.

"It took five hours every morning to apply the makeup and an hour every night to get it off. It was absolutely inhuman. But it didn't have the effect on me that it did on

Continued...

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others. I saw it happening over a period of five hours but when I walked on the set, other people would offer me their seats even knowing that it was me! I was paid an awful lot of attention as this endearing, old chap. It was most bizarre”.

What was your reaction to the finished product?

“I’ve not seen it yet! I think it’s a more Hollywood-type movie than Oshima’s film (*Merry Christmas Mr. Lawrence*). The last I heard was that *The Hunger* was given an X rating and that they were trying to bring it down to an R rating. Apparently, it is graphically violent and very sexy. I never saw the final version but I understand that there are some love scenes between (Catherine) Deneuve and (Susan) Sarandon”.

How did your association with Nagisa Oshima come about?

“I knew of him in terms of the films, *The Ceremony* and *In the Realm of Senses*. He apparently came to see me when I was doing *The Elephant Man* and wanted me all along for this particular movie (*Merry Christmas Mr. Lawrence*). He’d been wanting to do this movie for five years, but couldn’t because of his banishment from Japan. So, he came over to America and told me that he wanted me to do this movie. He asked me if I would wait for him (until the banishment was lifted) and I told him that I would stop whatever I was doing to do the movie. Two years after that he got on the phone and said, ‘We’re going to start filming in three weeks. So, get ready.’ I had to cancel a load of things, but I did it”.

What intrigued you about working with the man?

“The most amazing thing about Oshima is the loyalty that surrounds him, his crew, his cinematographer, his designer all refused to work for anyone else during those five years. Many of them went broke waiting for the master to make his movie. Another amazing thing is how fast he works and how emotionally wound up you get while working with him. I mean he just does one or two takes. He builds you up to know that your chief work is going to be done within one or two takes. So, you get into this momentum and you’re

emotionally living the character all the way through the day. You don’t have to go back and analyze what effect that scene will have as a piece on screen. Instead, you’re living, really living the part. Because you’re moving from one scene to another so quickly, you’re got to keep up with your character. I think it will be a really overwhelming movie”.

Can you describe your character and also detail what you feel is so compelling about this work?

“I just thought that it was a very powerful subject and a very interesting one. It’s a disorienting look at the Japanese point of view of the prisoner of war camps. Previously, the camps had only been filmed through the eyes of the Americans or the British: *Bridge Over the River Kwai* and that kind of thing. It’s as simple as when the Germans did their film, *Das Boots*, about the U-boats. This one is Japan opening up and saying, ‘This is how we feel about the camps and why we feel we were so sadistic’. Oshima’s such a left-wing guy that it’s not entirely sympathetic toward the Japanese. I only know the film very subjectively from the role I played: a disillusioned rather morally bankrupt, young Australian New Zealand lawyer who went into the army as a means of guilt more than anything else. I thoroughly disgraced my younger brother who was a hunchback by refusing to recognize him as my brother. Over the years this has given me this enormous guilt complex and my sure way out is to

“I never had much faith in myself as a performer”



go into the army and be a hero by dying”.

How do you feel you’ve improved as an actor?

“I think I’ve matured a bit more. Yes, I’ve dropped the character; I think my first confrontation with movies I wasn’t quite sure how to get out of the character at the end of the movie. I was warned — by Donald Sutherland — to be aware of the movies because I was new to them and wasn’t used to the vacuum at the end of a movie which lasts for two or three weeks. In the past — especially during *The Man Who Fell To Earth* — I’d carry some of the character through to my own life. It stayed with me for ages, but now I’m able to shake them pretty easily”.

Your work in film, as well as music, seems to be more European-oriented than directed toward the American market...

“I couldn’t agree more, I couldn’t agree more. I’ve been happy to the extent that my work has been accepted over here (in the U.S.). I think that I’ve been successful. I mean, that was my experiment and I found it very enjoyable. I had a notion way back — I want to say this without being pretentious — of trying to take what’s called high art and making it accessible (laughs) to a wider community. I was always the kind of kid who, when I found something new, wanted to tell everybody else about it. But, I was elitest enough to drop those things as soon as they became popular (laughs). I wasn’t alone about this; a lot of the early ’70s bands had the same preoccupation. One learns at art school how to apply it to Rock ‘n’ Roll. I think that Rock ‘n’ Roll became the new pioneer country for artists who couldn’t make a successful living as a painter. For a lot of us, Sid Barrett like Pink Floyd — it was a new land, a new kind of canvas to paint on.

“I think it’s been accepted amazingly well in the States although it ends up in America being categorized into some identifiable position. I do think my music’s MOR (laughs). And I don’t think people are aware of that. Art can be enjoyable (laughs); it can be a lot of fun! I guess I didn’t confine myself to one aspect of modern music and it seemed possible to play around with it and make a hybrid of R&B and art rock and whatever”.

You seem to have always considered yourself more of an all-round artiste rather than a

Continued on page 86

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*recording artist. You've studied art, directed and produced **The Lodger** and **Scary Monster** videos, acted on stage and film as well as participated in the production of your albums. Has it been a conscious effort to remain avant-garde?*

"I must say that I was terribly wary of being too well defined in terms of that I didn't want to be limited. If you become a main-stream artist, the audience will positively refuse to let you do anything new. I think Springsteen has been the most successful recently. He's been one of the few who have been able to crack

that and get back to what he considers are his roots. But he had an awful problem getting out of folk into hard rock, into the kind of music he wants to play. I wanted to be very careful and it made my audience much smaller, but it made me a happier artist. I'm my own liability. I can make any amount of mistakes and learn by them and not lose the audience that I do have because they're very partial to me moving around a lot".

By not limiting yourself to music as your only means of expression, do you feel that your recording career has endured longer than you would

have otherwise expected?

"Absolutely. I couldn't make it a career as such. I couldn't look around and say, 'Well, which song should I write or which song should I cover just to keep me successful'. That would be a cul de sac for me. It wouldn't have given me any kind of enjoyment. I might as well have gone back to painting. It just wouldn't have interested me enough".

Do you feel your acting has influenced your work as a musician or vice versa?

"That's interesting, isn't it? As a performing artist, I'll have to see. I mean, I haven't toured for... this will be six years; after *The Man Who Fell To Earth* I did tour for a short time but it was like the ice man cometh! It was certainly a very stoic kind of tour. It was definitely influenced by the movies but having done *The Elephant Man* and the new movies I think I might have redefined my attitude on stage. As far as my actual musicianship, it hasn't really done much. But I do believe that the directors have had an influence on my writing and making records".

Acting has always played a part in your stage persona though. When you played Ziggy, you took the role so much to heart that it appeared that you also became Ziggy off stage.

"Yeah, I've been terribly aware of that. I would never say that I have a terribly naturalistic stage persona. It was initially a means of getting my songs heard. I didn't really have full confidence in myself as a so called natural performer. Instead of just putting songs over in a natural way, I wanted to hide behind something. And so, at that time, the character became part and parcel of the songs. It seemed a good front from behind which I could perform the songs. I never had much faith in myself as a performer. But it's very odd, because it turned out that I was a good performer. Or was it that I was only a good performer because I was able to play a character?"

With all the projects you've been working on finally being completed, I imagine you're most excited about seeing the public's reactions.

"I guess I should be more excited than I am. But I've come to learn that anything you do is only as good as the feeling it leaves you with a couple of years later."

Vicki Greenleaf

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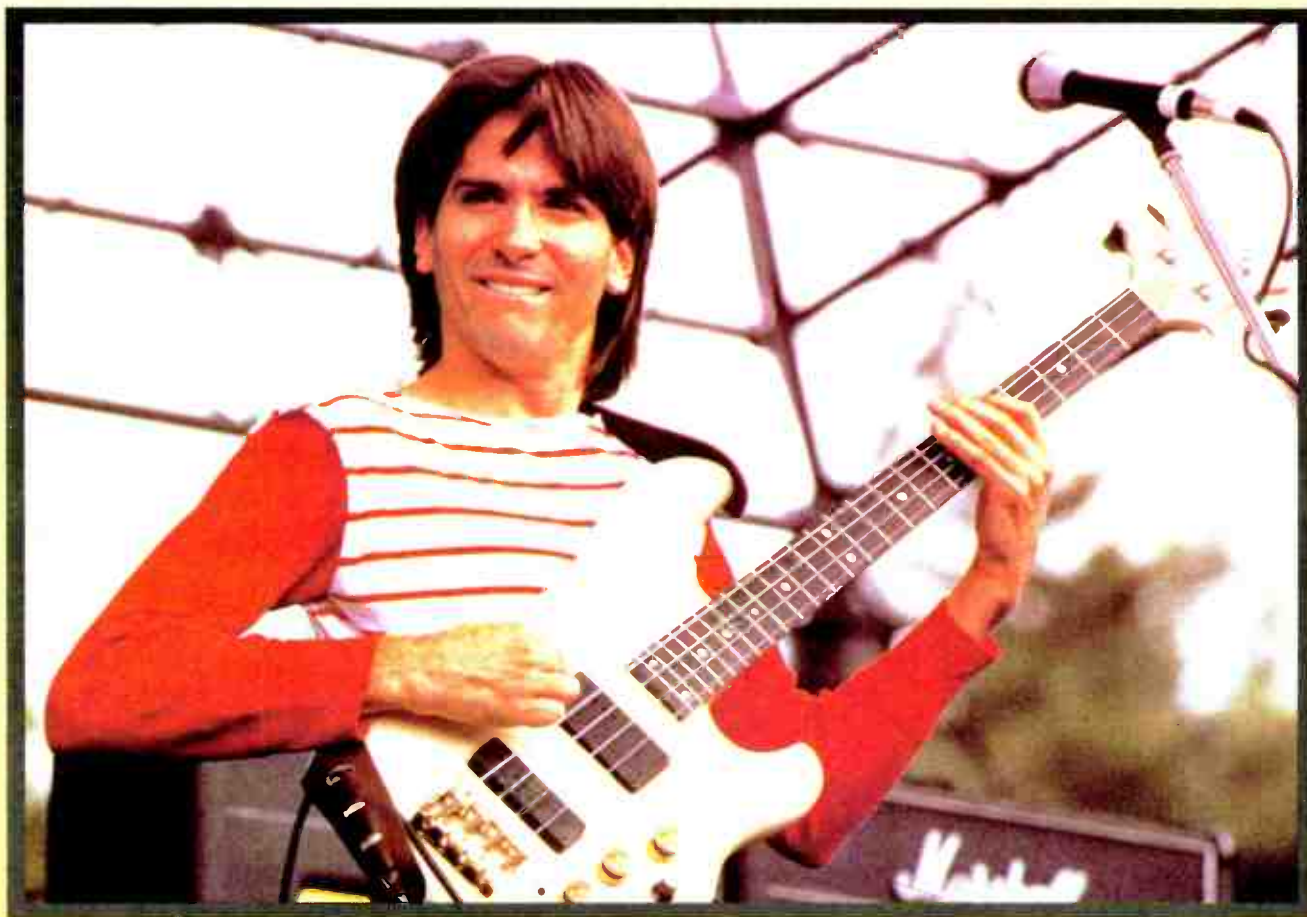
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Percy Jones: Going Fretless

Percy Jones, as anyone who has heard him play will tell you, is the world's premier fretless bassist. He is also so damnably modest about his gift that sometimes you want to grab him by the throat, shake him, and scream "Oh, come on! Don't tell me you really have no idea how good you are!"

Truth is, he does; it's just he'd rather play and ruminate on musical concepts than trade ego strokes, a refreshing trait indeed. Jones' work with "Brand X" established him as a formidable, yet faceless, instrumentalist. Since that band's demise, Jones has been playing and writing and shaping his music into a new form, and armed with new techniques, he's recently emerged from relative seclusion.

His new band, the first in quite some time as "Brand X" was a tough act to follow, is called "Stone Tiger". As we go to press, they will have just returned from a concert tour of Japan, and will possibly be readying themselves to hit the American road. If we're lucky.

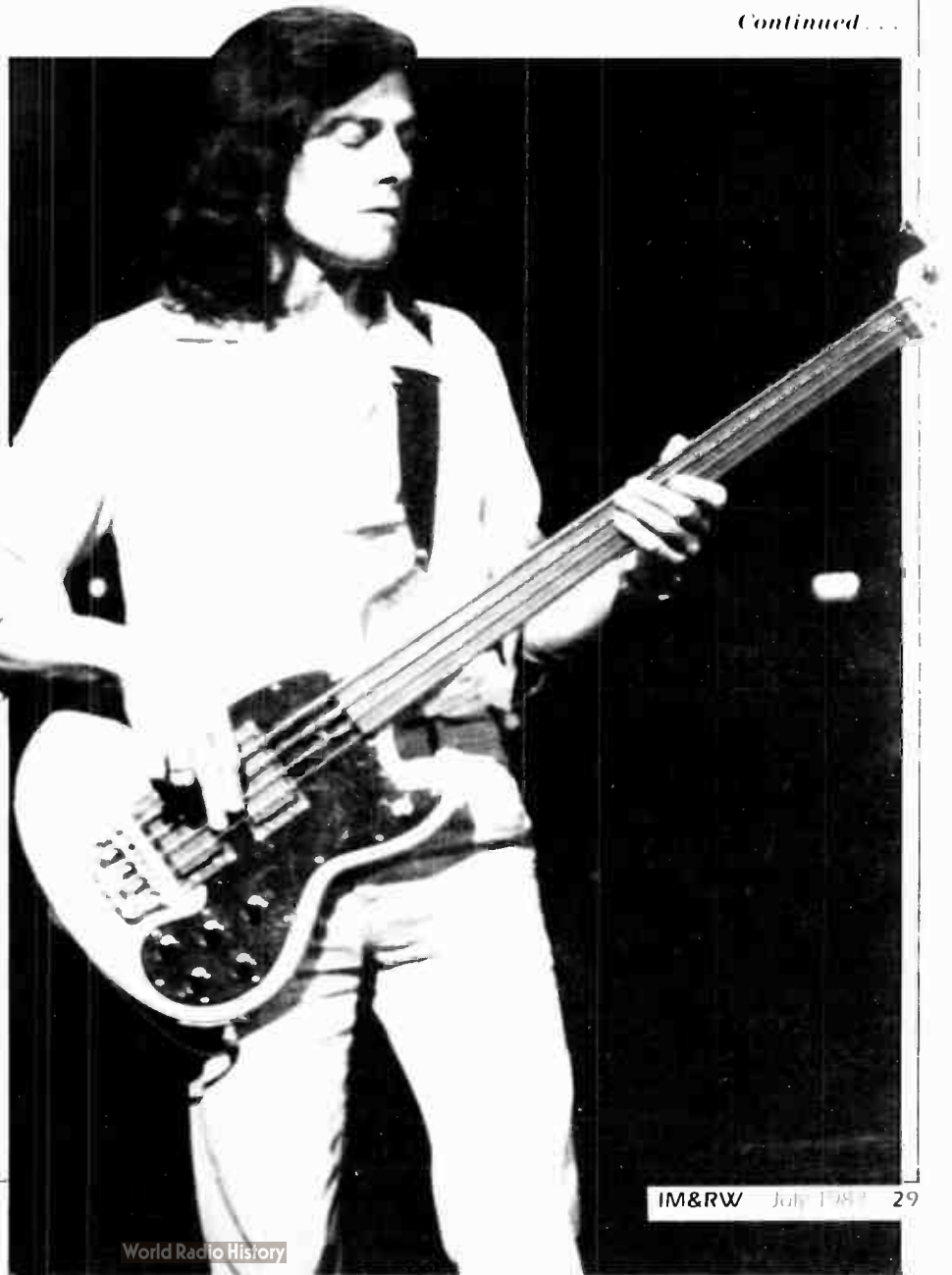
When asked by the editor to set my thoughts on the electric bass down on paper, I confess I was somewhat reluctant at first, having never attempted such a task before.

However, after some consideration, I began to think that perhaps I could help other bassists avoid some of the pitfalls which befell me earlier in my playing career, while also offering my own perspective on certain

aspects of playing the instrument.

All that aside, let's talk about a transitional stage that some players may be going through now, and others considering strongly, namely, making the transition from fretted to fretless electric bass. The main thing that seems to worry most players is whether they will be able to cope with intonation. In order to shed some light on this, I should go back

Continued . . .



...Continued

in time to about 1974, when I decided to make the transition.

At that time, I was playing an old Gretsch hollow-bodied bass which someone had likened to the Q.E.2. In spite of its bulk, though, the instrument had great character, as I had replaced the original pickups for a more versatile sound. My source for technical inspiration at this time was coming not from electric bassists (as the standard of playing was not particularly high then), but rather, upright players. My own technique on acoustic bass was very poor, but I watched and listened and learned as much as I could. Because the style of music that I was playing then was suited to an electric and not an acoustic bass, I was moved to try out an instrument that incorporated some of the qualities of both. This was a second-hand Fender Precision fretless, which I approached at first with great curiosity, wondering if all the years I'd already put into playing the electric bass were in vain. After only 10 minutes, I knew this wasn't so — much of my fretted



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bass technique was immediately applicable and this fretless instrument was yielding a "singing" quality that I had never been able to obtain with the old Q.E.2.

This tonal quality was so pleasing to me that it gave me the incentive to play and practise a lot — enjoying it immensely, as though I had suddenly discovered a new instrument which I hadn't known I was capable of playing until I picked it up. At first, the major obstacle for me was the adjustment from the feel of a hollow-body to a solid-body, since the latter does not "fight back" as much. This adjustment came rapidly simply by playing constantly. The next obstacle was getting the intonation truly accurate, for by this time, I was using the fretless at rehearsals, and the first Brand X album was impending — the pressure was on to get it right (or a "sound job", to quote an expression used in Wales and Spanish Harlem).

The neck had dot markers on the side corresponding to the fret lines, so the first thing I did was adjust the scale length so the notes fell right on the dots. This helped with intonating visually, but nevertheless, I did experience a parallax effect when looking at the extremes of the fingerboard. This feeling, though, I eventually adjusted to, as well as the odd sensation of playing *on* the fret (if it existed) rather than just behind



While all this practising and experimenting is going on, your brain is learning to establish a relationship between *pitch* and the physical position of everything between your left (or right) shoulder and your fingertips. This eventually (hopefully) becomes automatic. In fact, I once knew someone who could play "Donna Lee" and talk about "The Lattice Theory of Quark Confinement" simultaneously, though I'm not sure of the musical value of this particularly unique achievement.

As time goes by, you should be exploiting many of the possibilities

made available to you as a fretless bassist, many of which are now possible on the fretted bass. One obvious one is glissando, which can be used in subtle ways such as using quarter-step intervals as passing notes — or even as bona fide notes — in a scale if you are interested in some of the Eastern forms of music. Your success with this technique will depend on your ear-brain motor circuit rather than your eye, and will come only with practice and patience.

Next month, we'll talk about other fretless techniques and other exciting things...

it, as with a fretted bass. Despite this visual aid, though, the crux of good intonation lies with the ear, especially in the bigger register. The first step I took on the road towards building complete facility with the fretless was to work on developing a feeling for where the notes fell on the fingerboard. I found that the quickest way to achieve this was to use open strings or harmonics as tonal references (of course, be sure your bass is in tune first, and that the bridge is correctly adjusted). For example, if you want to locate F# on the open G string, play it along with an open D string and you will hear that familiar interval, the major third. If you *don't*, then you are not fingering the note correctly. You can find a relationship between most notes on the fingerboard and the open strings. As an alternative to open strings, harmonics can be used. For instance, say you are attempting to intonate Bb on the D string — rather than relate this to an open E string (which creates a rather dissonant interval, at least for this purpose), play the D harmonic on the G string along with the Bb, and you should again have a major third. You can see it is highly worthwhile to find all the harmonics on the fingerboard and to know what notes they are. This is time well-spent, as a good knowledge of this will improve your overall musicianship.



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“Miles’ Mode”

Solo by John Coltrane

In the course of writing this column, I have concentrated on two areas: important *solos* and *tunes* which aren't available in sheet music form or fake books. I think that repertoire is extremely important to the Jazz musician. A large and varied knowledge of tunes increases one's chances of working often. More important, a tune is really a form for which the musician supplies the content, and a limited or uninteresting repertoire will have a stifling effect on his creativity.

In the past, I have transcribed “Ruby My Dear”, “Soul Eyes”, and “Blues On The Corner” as examples of

alternative types of tunes. This month, I've done Coltrane's “Miles' Mode” (*Coltrane*, on *Impulse*). This is a “modal” tune which is rarely played but is, in my opinion, one of the best of its kind. The melody in the first four bars is a 12-tone palindromic canon. It is a 12 note phrase using each of the tones of the chromatic scale once, followed by that same phrase reversed. Consequently, the first four bars of the melody read the same backwards and forwards. The solos are in C minor.

Dan Petrow

The musical score is presented in six staves of music. The first staff begins with a treble clef and a 4/4 time signature. The first four bars of this staff contain a 12-tone palindromic canon, a sequence of notes that reads the same forwards and backwards. The third staff features a long note with a '16 fill' annotation above it, indicating a 16-measure fill. The score concludes with a double bar line on the sixth staff.

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The Art of Bauhaus

Back in the old days when revolution was merely the act of punctuating your sentences with 'man', and beating the system simply involved buying a student railcard, the renaissance of musical rebellion was but an embryo. All you had to do to swell the ranks of these rebels was to cut a: The length of your guitar solos from 15 minutes to 15 seconds, and b: Your hair.

Today, after Acid, Glam and Punk Rock, musical rebellion has been made a lot easier — the pathway has already been cleared.

Bauhaus are coming to the end of that pathway and are in that uncomfortable niche between cult acclaim and social acceptance.

The reason for Bauhaus being in this position is the stark, dark doom music they play. Music that is unbending, in as far as conforming to the Rock norm goes, and unnerving as far as listening to them goes.

I met Bauhaus backstage at Riverside Studios in London, where they were preparing for a final rehearsal before the first take of their appearance on a British television Rock program called *The Old Grey Whistle Test*. They greeted myself and photographer Paul with a friendly "You're late" — it was good to set off on the right foot.

Pete Murphy, the one who looks like the mutant offspring of Iggy and Bowie, promptly decided that IM&RW wasn't for him and promptly left the room, sucking his cheeks in as he went. As I fiddled with my new tape recorder I pontificated the reason why the man actually bothers to suck his cheeks in. I mean if his cheek bones were any higher his ears would be on the top of his head.

Meanwhile the band's taciturn bass player, David Jay had sat himself down and from the determined glint in his eye I gathered that this wasn't going to be easy...

So as Paul clicked and flashed like a maniac in the background I plunged straight in at the deep end. Are Bauhaus non-musician musicians?

Dave: "To a point yeah, in the unorthodoxy of our approach. We don't approach things from a

musicians point of view. We find that we approach things from a lateral point of view. We like to maintain an element of spontaneity in our work. I mean who needs set formats?"

Don't you think that you're working to a set formula by playing what is ultimately Rock music anyway?

"We're doing something that's different within the realms of 'Rock music'."

So why did you choose Rock music as your medium?

"Because it was a natural thing for us to do. When we were kids it was the thing that was uppermost as a stimulating form of expression, it was coming at you in every form and



couldn't be ignored."

So what inspired you to start playing as an individual?

"I was fascinated by the Reggae import records in 1970 and I just wanted to work out what was going on there because it seemed like some sort of alchemy and it really knocked me sideways. In a way I regret finding out what was going on because it seemed more magical when I didn't have any idea. I really wanted to play bass as it was the predominant instrument in Reggae so I started playing on the bass notes of an old acoustic six string, and as soon as I could afford it I bought a cheap Fender copy bass and I used to play along to the radio records, you know, anything."

How did Bauhaus actually form? Was it through a desire to play the sort of music that you play, or to satisfy a deep affinity you all have for each other?

"Well Kevin (Haskins, drums) had been in the seminal Northampton Punk outfit, the Submerged Tenth, who played a total of three gigs, all of which are now legendary in Northampton and are talked about in a hushed breath. The guitarist left and Danny (Ash) joined, but we never actually gigged then. Danny wrote some stuff with Peter whom he'd known since school and they pressganged Kevin into drumming for them, and then got a bass player who didn't fit so they contacted me and asked me to play with them at their next gig. I said, 'Fine, when's the next gig?' and they said, 'Tomorrow night'. So I had to learn the complete set in one night, which resulted in us playing *Raw Power* four times in one night, merely through lack of material."

All pretty run of the mill stuff. The post Punk idea is now a hackneyed answer that you can expect from the vast majority of bands. This cliché seems slightly incongruous to the radically unique noise that Bauhaus make, as does their history of cover versions ranging from the recent *Ziggy Stardust* to the earlier attempts at Bolan's *Telegram Sam* and Lou Reed's *Waiting For The Man*. Why, if the band are trying to get away from the big Rock'n'Roll cliché (which is so boring), do they persist in paying homage to the people who started the whole thing?

"It isn't a tribute really, it's just that we felt like playing them at the time and offer an interpretation of them".

The version of *Ziggy Stardust* is very strict to the original.

"Well we just did that because we wanted to do it. We had never intended recording it or anything like that. It was just that it was so popular and we've been kicking away at this door that opens up to new horizons for so long, we've put out eight singles most of which could, and should, have been in the charts."

Why weren't they?

"Because we've never been exposed to the mass populous and we're just starting to get out of that underground ghetto that contained us for so long. The *Ziggy* single is, in fact, a double A side with *Third Uncle* and we thought that it would really give that door a good kicking, and once we're there you see we can poison the minds of the nation's youth".

What do you want to poison their minds with?

"You have to wait and find out".

On that note I turned my condenser mike towards drummer Kevin. When did you start playing?

"Oh a long time ago, about seven years ago. I just wanted to drum. It never entered my mind whether I'd play in a band or not. So I had drum lessons for about a year from a guy who plays in a dance band and he'd teach me Bossanova type things and then say 'This is a Pop tune'. I actually used the Bossanova thing on our first single *Bela Lugosi's Dead*. Mostly I just picked things up from playing along with records."

How did the Bauhaus sound come together?

Dave: "It was just natural evolution, it wasn't premeditated or anything like that. Maybe subconsciously we knew the sound we wanted, but it was never calculated."

Was it calculated in as much as you wanted to sound different?

"Well there'd be no point in doing it if we weren't going to sound different. It was more of an attitude at the time than the sound, I mean that was almost secondary."

What is this attitude?

"It's a hard attitude, an attitude of confrontation. . ."

Do you think that there's still a need for that sort of attitude?

"Oh yeah, more now than ever. Things are getting so soft and stupid. The records that come out these days are just a load of old garbage. It's a shame that Punk didn't infiltrate more so than it did".

This was a real 'my sentiments entirely' situation and I was sitting there like a nodding dog without a

car window to look out of. But a good wholesome IM&RW journalist isn't meant to agree with unsavoury anti Rockist rebels such as Bauhaus so I got back to the reason for IM and asked Dave what gear he used to produce his inimitable bass sound.

"Oh I knew we'd get around to this," he said delighting in the fact that he wasn't going to answer my question, "Er mainly black suits and black shirts".

Yeah, are the dark glasses important to the sound?

"No they just help me to see".

How about the shoe laces, which type do Bauhaus favor to produce the sounds we all know and love?

"Well predominantly black; the thinner the better".

Is that conducive to the bass sound you want?

"No they're just conducive to walking in a straight line without your shoes falling off".

I didn't have the heart to tell Dave that Haircut 100 had pulled exactly the same stunt when we'd interviewed them. Anyway he was laughing so much he probably wouldn't have heard.

If at first you don't succeed. . . Kevin what kit do you use?

"(Laughs) I can't think of a clever answer. . . I use a Ludwig drum kit".

How many drums do you have?

"Five or six. . . do I get to do a drum review now and keep all the drums?"

Do you as a band feel that if you want to get your message across you need to be technically competent?

Dave: "Yeah competent enough to express your ideas. But I think that there's a danger of surpassing that — we don't want to get too good, too proficient".

Would that limit you?

"It would be limiting in that it can remove the raw immediacy of the music".

Kevin: "I think if I knew too much I'd be trying to use that knowledge too much — it would take a lot of discipline. I think things can get cluttered up.

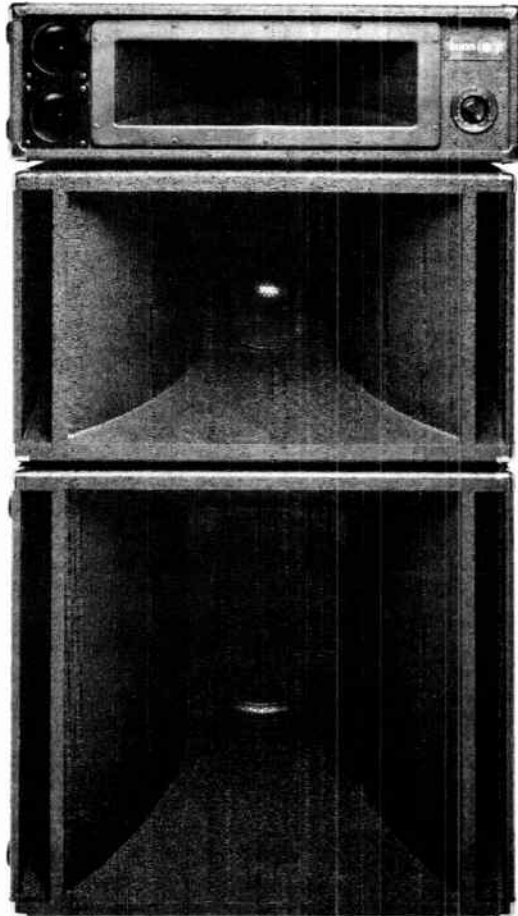
"I see space as just important as filled space."

Getting onto more general issues. Do you resent being a CULT band?

Dave: "We don't resent being a cult band, but we resent not being a chart featured group and being disgustingly rich. We want to be in the position whereby we can do whatever we want and it's received on a very wide scale rather than just

Continued. . .

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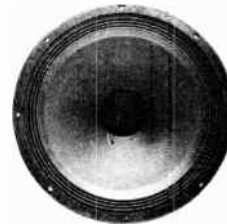
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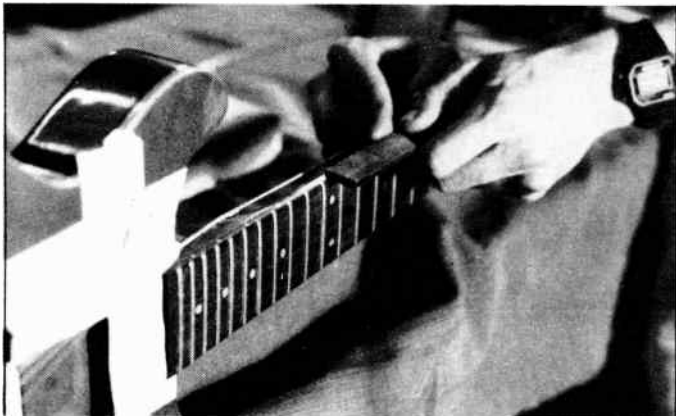
Of all the areas on the guitar that you require attention, the neck and fingerboard are the most demanding. There is a great deal of skill involved in detecting or determining what maintenance is required, and an even greater amount to actually perform it. In previous issues, we briefly covered high frets and how to deal with them. In this issue, we'll cover sharp-edged frets and the essentials of profiling frets.

Sharp-edged Frets

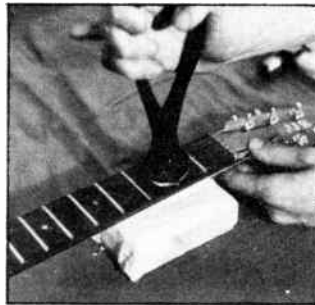
What are sharp-edged frets? If you have to ask, chances are you don't have this problem. Bless you, my child. However, I'll explain anyway. In short, sharp-edged frets are PAIN. These are the edges of the fret protruding just ever so slightly off the edge of the board creating a miniature skin remover even the Marquis de Sade would have been proud to own. This problem is easy to detect and almost as easy to remedy. I usually like to tackle this problem in conjunction with profiling the frets, as both procedures have to do with the same portion of the fret itself.

Your basic tools are the sharpening stone, some 400 grade wet dry sand paper, and a small fine double-cut file. If you are able, try to grind the edge of the file smooth, thus lessening the chance of scoring the face of the fingerboard. The tools to alter the profile of the frets will include (if obtainable) a set of fret files. These are not necessary, but are helpful.

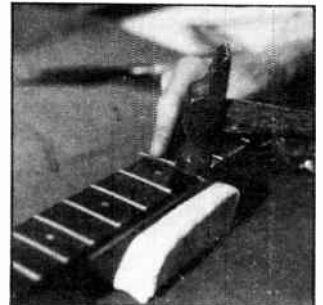
Let's tackle the sharp edges first. Take your guitar and position it so you have access to the edge of your board and feel comfortable working on it. Begin by working on whichever side is giving you the most trouble. Oil your stone generously and lay it on the edge of the neck so the flat of the stone is on the edge of the frets. Gently move the stone back and forth along the neck, being particularly careful not to slam the stone into the body or head stock of your guitar. Stroke the edges a few times and observe the area to notice how much material is being removed. You want to remove *only* the excess fret, not touching the fingerboard itself. I always stress moving slowly and cautiously, keeping always on the alert and watching



Filing fret ends flush



Removing fret using end cutters



Tapping down new fret. Note radius of fret

closely. You certainly do not want to remedy one problem while causing another.

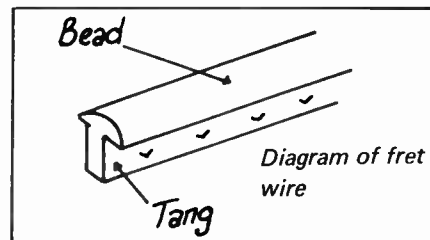
If you are wondering where these sharp edges came from, allow me to enlighten you. The fret, being made of metal, is not affected by a change in climatic conditions; however, the wood on your fingerboard is. The wood is highly subject to shrinkage. When the wood shrinks, even only slightly, the fret will protrude past the edge of the board causing the very sharp edges of the *tang* of the fret to be extended just enough to mutilate your fingers and/or your hand, depending on the severity of the condition. At any rate, by grinding them level, the condition is cured. Of course, if this were a new fret job you would have to tackle the edges of the newly installed raw fret anyway. But this is another topic we'll cover at some other time.

Profiling

Profiling is changing the actual shape of the round portion of the fret. This is more commonly referred to as the *head* or sometimes head of the fret. The fret becomes altered by normal wear, or after having been filed. At this point you may prefer to have the original shape restored. If you have access to a set of fret files, great. If not, don't fret (I'm sorry, I just couldn't help myself.)

For the novice, I now suggest you take some masking tape and cut off enough 3" pieces to tape the fingerboard on each side of each fret. This will lessen the chance of your marring the face of your fingerboard. This done, we will now proceed.

Take a few moments, and study the area you are about to



Continued...

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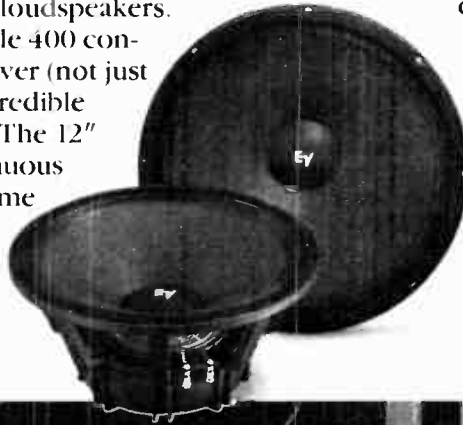
tion of maximum efficiency, low-frequency speakers designed for cost effective, high-level performance. The EVM PRO-LINE can give you the extra punch you need with freedom from fear of failure—even when pushed to their limits.

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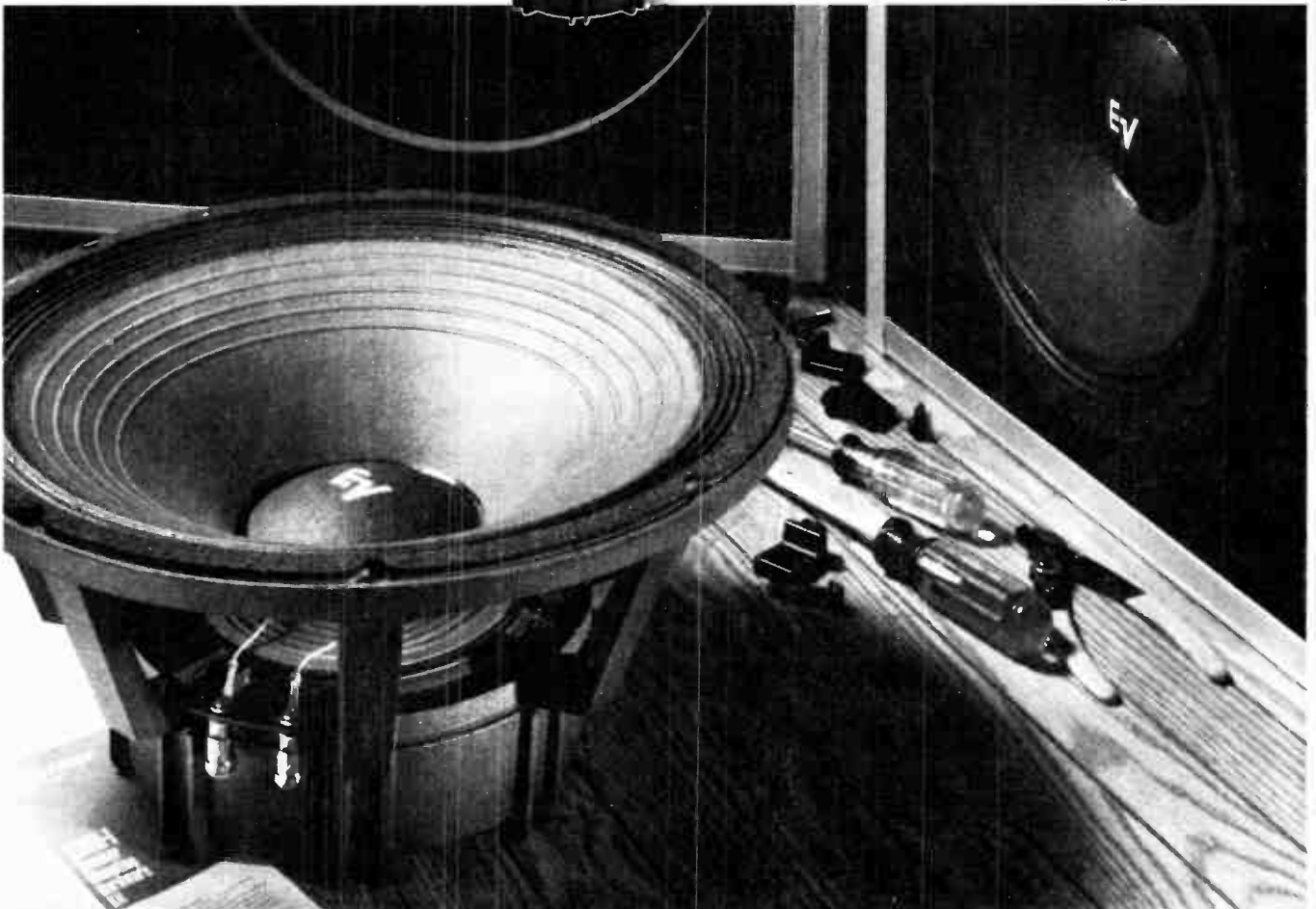
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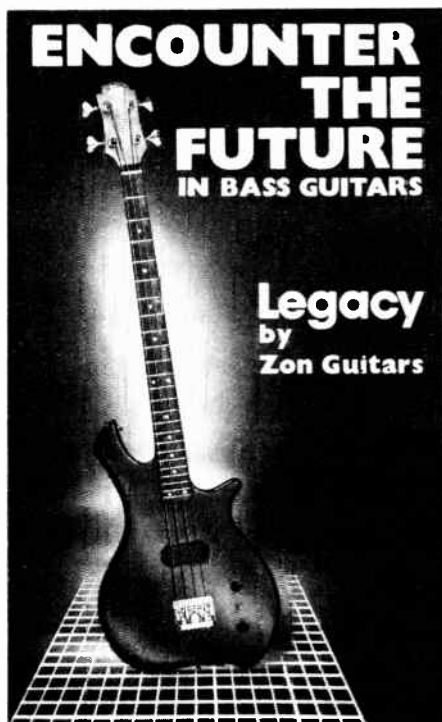


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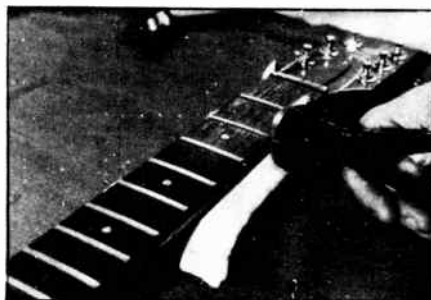
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Filing fret ends with three-cornered file

Profiling fret with Pillar file

... Continued

work on. You want to be real familiar with the shape that now exists, and the one you are about to render. You will notice the sort of squared-off shape each fret has taken (either by normal wear or induced by your stone). Your intention is to take that squared-off edge and change it slightly to a more rounded shape. It doesn't have to be totally circular, but rather a simulated shape, with just the sharp edge taken off to suit your comfort.

Take the straight file (I'm assuming you may not have access to a set of fret files) and place it alongside the fret. Set the file at an angle with the edge of the file resting on the tape and the teeth of the file resting on the fret at a slight angle. File the fret in a back-and-forth motion, noting as you file the change in the shape of the fret itself. You do not want to overdo the amount taken off so again, proceed with caution! File both sides of each fret in this manner. Follow through with the stroke, making sure you cover the length of each fret you are working on. You must also be sure to hold the file steady as you work, so the shapes will be consistent. If you find it a little difficult to cover the frets in the upper register with one stroke, file half the fret from the bass side of the neck, and the other half of the fret from the treble side.

Work on each fret going up the fingerboard, *always studying your work as you go along*. I stress this greatly because it's easy to make a boo-boo by not paying attention to what you are doing. Anyone can do a bad job... let's see if you can do a great job.

If you happen to gain access to a set of fret files (Ibanez has a good set) you'll find the whole procedure is a hell of a lot easier. The files, as you will notice, are concave on the edge so that they actually fit around the frets themselves. They come in a number of sizes depending on the width of the fret in your fingerboard. The file has only to be passed over the fret and the sharp edges are knocked off with great ease. You would then use the same modus operandi as you manoeuvre up the board, shaping both edges of each fret with one operation, this being accomplished by the preset concave pattern of the file that hits both sides of the fret at one time.

After having done each fret, you will now want to put the finishing touches on by polishing them with the 400 grade sandpaper. This, you may remember, we have covered in the last issue. Take the sandpaper, wrap it around the stone, and using an across-the-fret motion, lightly polish all the frets on the board. Keep the stone flat, and continually move upwards as you move crosswise.

This done, you may now want to go a step further and compound each fret with fine rubbing compound, and a soft cloth. They look super, ... don't they?

It takes a great deal of patience to put these tips into practice, and a great deal of practice to carry out a decent job. By all means, work carefully and slowly and you should be able to stay out of the red zone. Although I'll be a bit busy (with three gigs in London) during June and July, should you need a question answered, please feel free to write me care of IM&RW and I'll do my best to answer all mail. See you next month.

Ron DeMarino



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COMPUTER SYNTHESIS EXPLAINED

Introduction

In the earlier parts of this series, the emphasis was mainly on synthesizers in which the computer was a clearly identifiable part of the system. For example, conventional analog synthesizers can be controlled by a special purpose computer such as the Roland MicroComposer, or by a general purpose machine such as a PET or an Apple, given suitable interfaces. The other approach to sound synthesis, described in parts 4 onwards, dispenses almost entirely with analog devices, the computer itself generating the audio waveform. However, computer technology is now also incorporated into many keyboard instruments, disguised from the player by clever design. Perhaps the cheapest example is the remarkable Casio VL-1 a monophonic synthesizer with the ability to memorize keyboard performances and programmable sound envelopes, and which in addition can be used as a calculator. The very same memory locations accessed by the calculator memory key contain the numbers which determine the waveform selection, sound envelope and degrees of vibrato and tremolo!

Most keyboard players will be aware of the growing sophistication of electronic keyboards. Rhythm units linked to the lower octaves of the keyboard in such a way that chords are strummed in complex rhythmic patterns, automatic bass note generation with walking bass

Entry No.	Lower Interval	Upper Interval	Quality	Inversion
1	4	3	major	root position
2	3	5	major	1 st
3	5	4	major	2 nd
4	3	4	minor	root position
5	4	5	minor	1 st
6	5	3	minor	2 nd

A "lock-up table" giving the intervals between the notes of major and minor triads in all three inversions. The entry number (i.e. the position in the table) can be regarded as a code which identifies a particular type of triad.

parts, and automatic glissandi and arpeggios are just some of the facilities included in the latest generation of keyboards, even at the lower end of the price range. Digital circuits are used to produce all these effects. Even further sophistication is to be found in, for example, the Casio 701, which is capable not only of memorizing performances (both melody and chords) but also can 'read' special scores which it will subsequently perform AND allow the player to perform on its keyboard at the same time.

This article is the first of two which take a look inside this type of instrument, explaining how they work in the context of ideas introduced in earlier parts in the series.

Identifying chords

If an instrument is to remember a chord sequence (a 'progression'), there are a number of ways it can go about the task. The most obvious and least efficient is to memorize all the individual notes which make up the chords. (In what follows, inversion numbers are specified in brackets following the chord symbol; R means root position). For example, the progression Dm7(2), G7(R), C(2) would be memorized as the notes A, C, D, F ; G, B, F; G, C, E. Clearly this is a long-winded way of writing the equivalent expression Dm7(2) etc. Viewed from a different standpoint, chord symbols are a compact way of specifying groups of notes which otherwise have to be specified individually — usually as notes on a staff. So a more efficient way of memorizing a chord sequence is for the instrument to store numerical codes which represent the chord symbols. If the chord symbols are to be deduced from a performance, the instrument's internal computer must attempt to go through exactly the inverse of the process carried out by the keyboard player reading the accompaniment part from chord symbols.

Entry No.	Number of semitones between root and lowest note
1	0
2	8
3	5
4	0
5	9
6	5



A "lock-up table" (above) which allows the root of major and minor triads to be identified from the lowest note and the entry number derived from the table in Figure 1. On the right are the equivalent binary numbers, showing how the table may be stored in consecutive memory locations, starting at any convenient address (denoted by B). B is known as the "base address" of the lock-up table, and the entry number is equal to B + 1.

Continued...

Lloyd Ryan's Drum Clinic

Ex 40



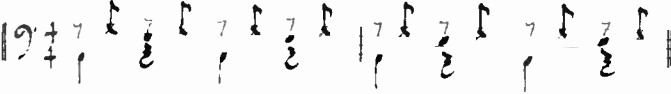
Ex 41



Ex 42



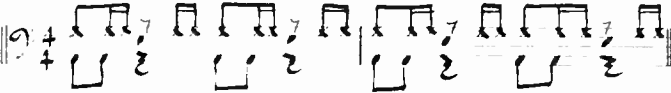
Ex 43



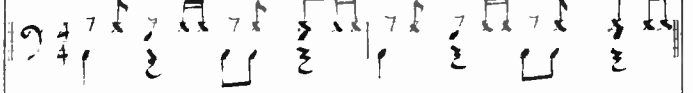
Ex 44



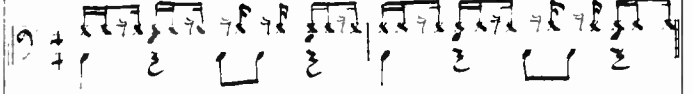
Ex 45



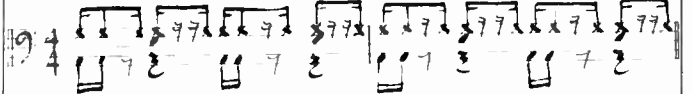
Ex 46



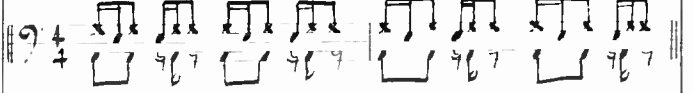
Ex 47



Ex 48



Ex 49



Ex 50



Before starting this month's column, I would like to thank those of you who have written to me over the last few months with suggestions and comments regarding the column. Some of the letters have been really good, especially the one letting me know what I can do with my drumsticks, though I think perhaps it could be a physical impossibility. And thanks to the man who wrote to me from Brixton in Sawahili — I had to get Tony Horkins to translate it for me (he's seen Zulu ten times). Oh yes, and thanks to Janet Angus for her tolerance with my terrible music writing and spelling. Right,

that's the crawling over, now back to the column.

If you remember, a few months back I asked you to send in your own ideas in the form of a Funky beat, and as promised, we would publish the best three. I've picked what I believe to be the best three, starting with Mr Alkema, aged 17, from Esher. This one (Ex. 40 — Jazz Rock) will require a little practice.

The second, Ex 41, is from Paul Hurt who plays in a band called The Ellxir. This makes excellent use of the paradiddle.

The third is a very interesting Rock rhythm when played at a reasonable pace (Ex 42). It sounds a little like the Samba, and was sent in by Alan Johnson from North London, aged 21.

Moving on to this month's column, the Rock beats have all been made up of even notes. We are now going to break up the hi hat or cymbal rhythm — see Ex 43.

This type of beat can add another dimension to your Rock playing. The remaining eight rhythms will give you something to practise.

Next month we are going to deal with semi-quaver triplets and start on the 26 American rudiments. Keep practising, see you next month...

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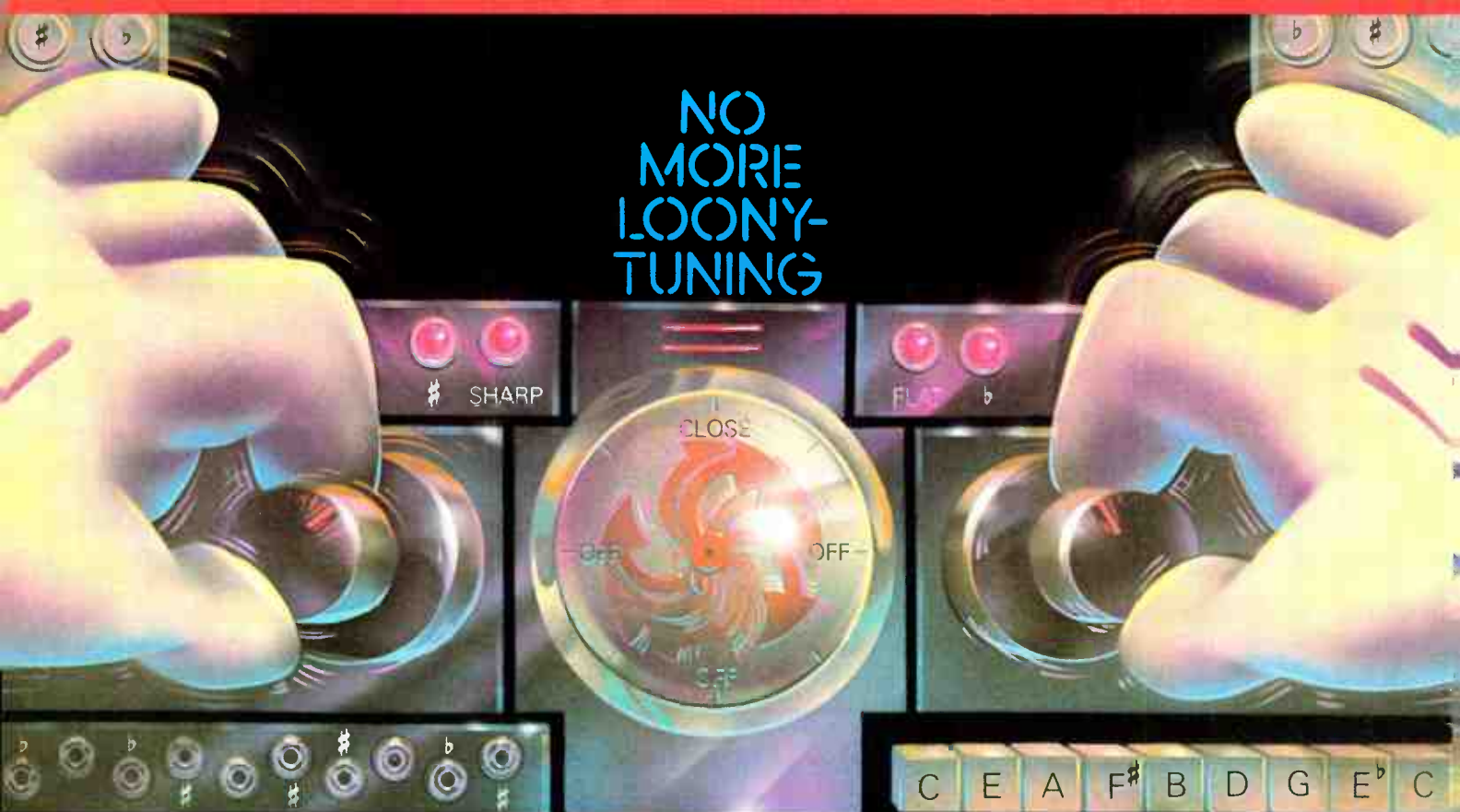
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2. whether you're on-pitch, sharp or flat,
- and 3. How many cents sharp or flat you are.

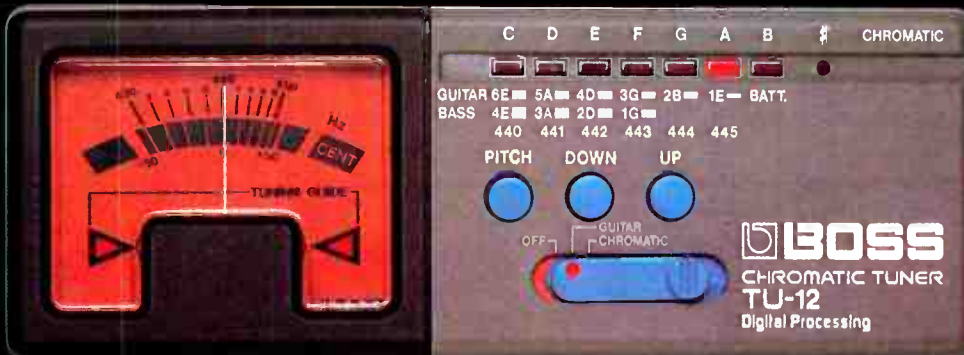
The amazing TU-12 accomplishes this wizardry through a quartz tuning circuit processed by a miniature computer, all mounted on a single integrated circuit chip.

Visually, a band of LEDs tells you what note is being played, while another LED indicates chroma-

tics or it can be run in-line between an instrument and amplifier for instant tuning without affecting the signal in any way. Guitar and Bass can be easily tuned by switching from the

Chromatic Tuning mode into a Guitar mode which attunes the TU-12 to each guitar string. It can also be set at concert pitch from A-440 to A-445.

So get serious and stop all that loony tuning. For only \$89.50, the TU-12 is a downright sensible investment. See the BOSS TU-12 at your dealer or write Boss Products, c/o Roland Corp US, 7200 Dominion Circle, LA, CA 90040.

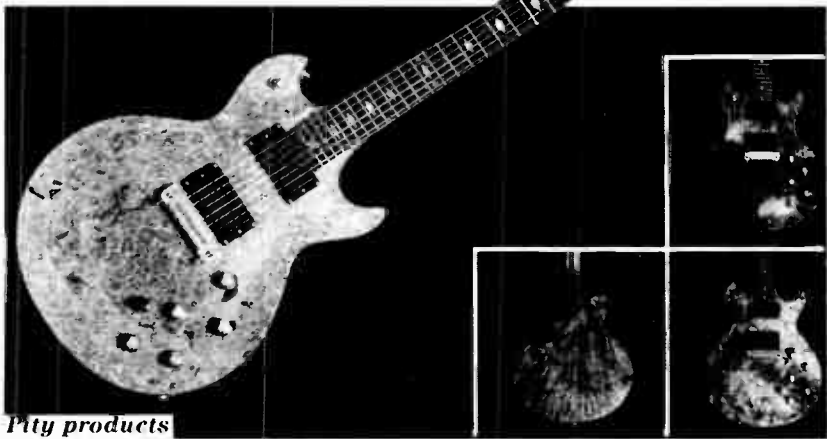


Product News

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One of the most respected names in custom guitar building is Moonstone, a small outfit producing high end instruments hand-built from exotic woods like burlled maple and high-tech synthetics like graphite. Their speciality is custom-designing exactly to your specifications, and their instruments range in price from about \$1000 to \$2500, suggested list (stock models). Contact Moonstone Guitars for information about the realities of custom-made guitars at 112 G St., Arcata, CA 95521, (707) 822 6276.

Continued . . .



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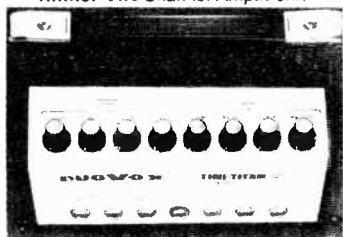
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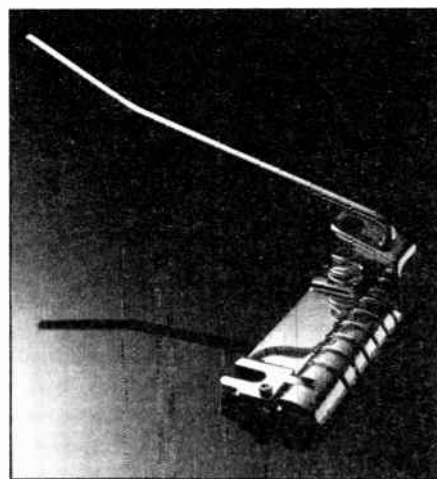
AMPLIFIERS Hand-crafted, no tubes

Pearce Engineering's GI amplifier is a hand-built amplifier (in the tradition of Mesa Boogie), that is constructed with solid state circuitry rather than tubes. The GI features full footswitching capability, three inputs — each with controls for volume, bass, midrange, midrange center frequency, treble, reverb, and input drive — as well as a master reverb and a limiter. The people at Pearce say that their solid state design delivers a 'tube' sound while providing the convenience and reliability of transistors. The amp is available in either a combo (12" speaker) or rack mount configuration, with 110 watts RMS.

Contact Pearce Engineering at 44 Fairfield St., Buffalo, NY 14214, (716) 837-3877.

New handles

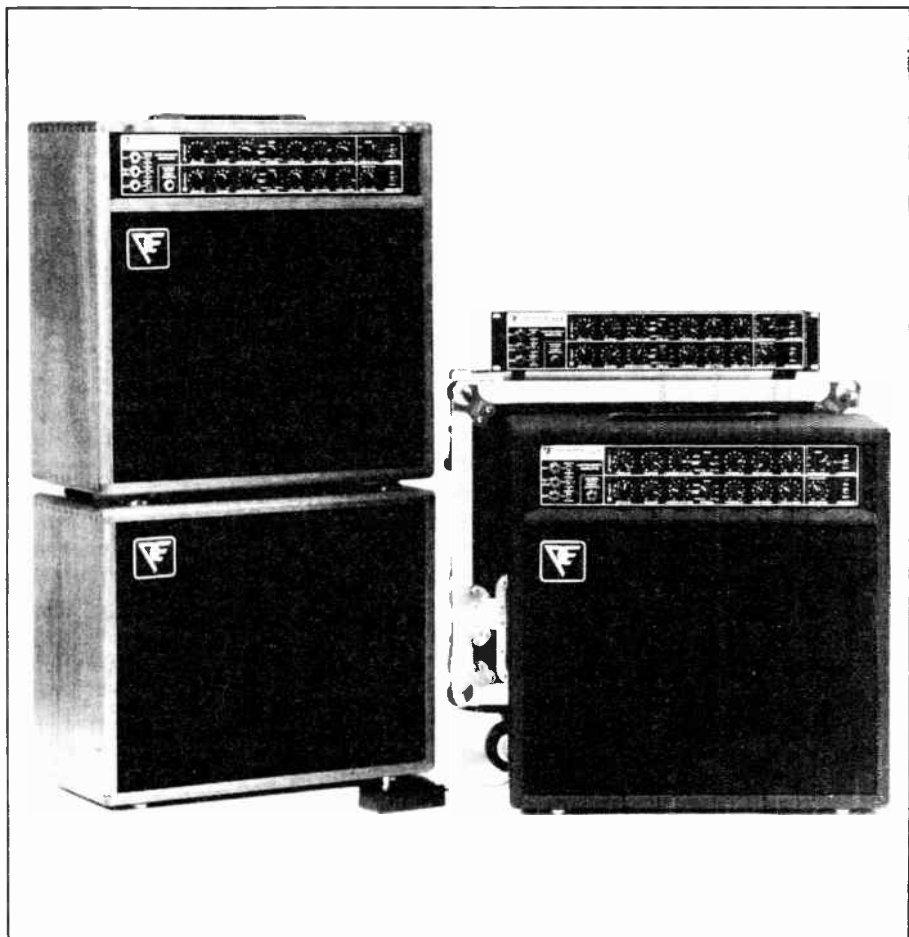
Bowen Music has made some additions to their Bowen Handle vibrato for guitars. The Handle is



Handle with care

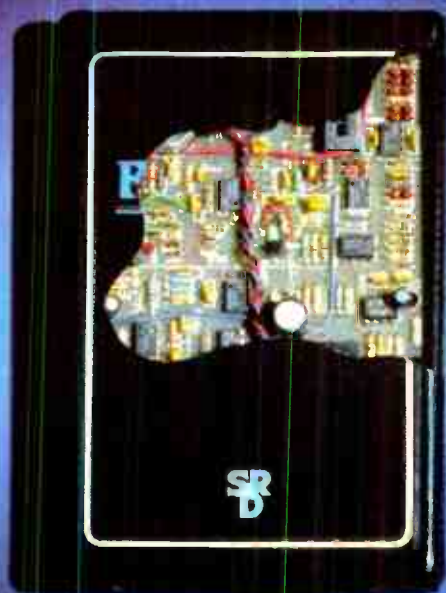
now available in a black finish, as well as chrome and gold, and they've added a model for left-handed players, available in either chrome or gold finish. Prices range from \$59.95 for the standard chrome Handle to \$129.95 for the left-handed gold-plated model.

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Product News

Light, medium & heavy metal

Copper picks? OK... The Hotlicks copper pick is manufactured from a heat-tempered copper alloy, and the manufacturer tells us that this material retains its shape during the picking process far better than any other plectrum material (with the exception of stone, which is subject to breakage upon being dropped). In

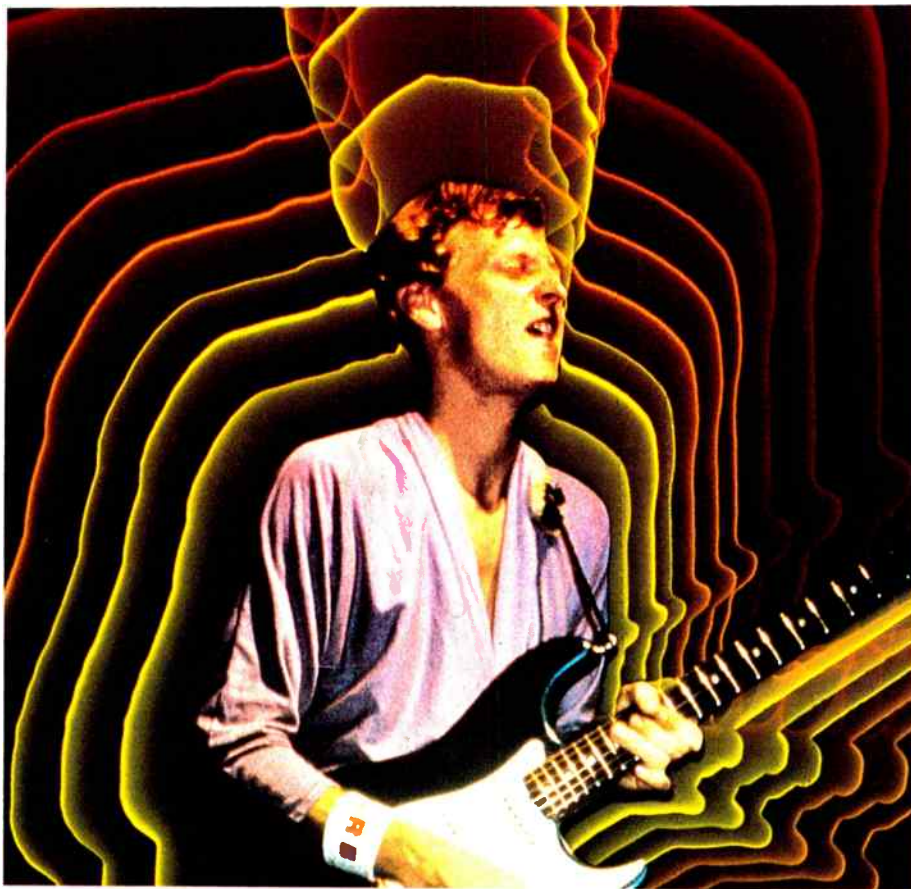


Hotlicking picks

addition, the copper pick takes a lot of abuse and wears more slowly than other pick substances.

Hotlicks recommend their picks primarily for electric guitar playing — the metallic tone they deliver seems to sound best with electrics — and the picks come in 6 gauges, from Extra-Thin to Extra-Heavy.

Suggested retail price is \$3.95 per package of five picks, and more details may be obtained from Hotlicks, 2554 Lincoln Blvd., Suite 192, Marina del Rey, CA 90291.



Dean Markley Amp

We don't have much information to go on at this point, but Dean Markley amplifiers are now available to the public, following the success



Dean Markley Amps

of the prototype testing. Production will be on a limited basis, and for now, the picture will have to suffice.

For details contact Dean Markley Sound, 3350 Scott Blvd., 29, Santa Clara, CA (408) 988-2456.

London calling

New from Fender is the London Reverb Series of amplifiers, designed by, of course, Paul Rivera, who is the man responsible for the shape the Fender amp has taken from the very beginning. The new amps are said to deliver the 'Fender' sound



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Product News

while providing a great deal more versatility due to the tone control set-up, which includes a 4-band active Eq in the Lead channel in addition to the traditional passive controls in the Normal channel. There is also a 5-band graphic Eq, which may be preprogrammed into either or both channels.

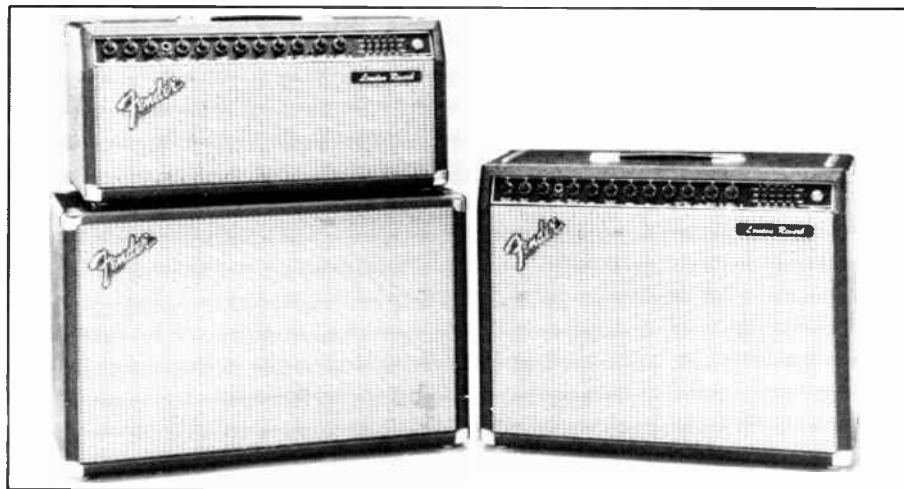
The 100 watt London Reverb Series also includes an effects Loop with adjustable send and return levels, preamp-out and power amp-in patch points, and a 4-way footswitch which features illuminated function indicators that also appear on the amp's front panel.

Contact Fender for info at 1-300 E.

Valencia Dr., Fullerton, CA 92634, (714) 879-8080.

George L's strings

George L's new strings are available in stainless steel, nickel, phosphorous bronze, acoustic bronze, and classical sets. They are said to be exceptionally durable, providing excellent balance and sustain, and feature an extremely narrow string to spread string tension. There are



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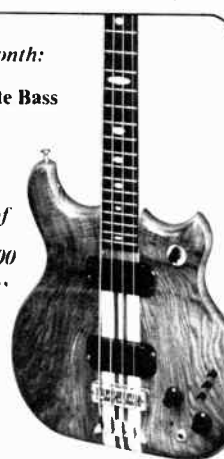
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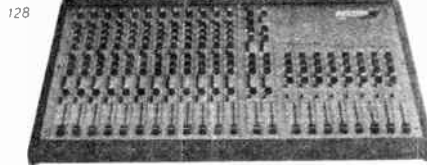
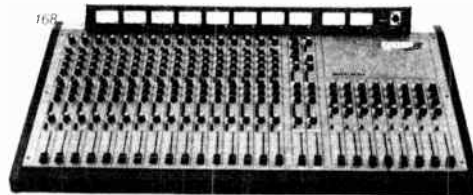
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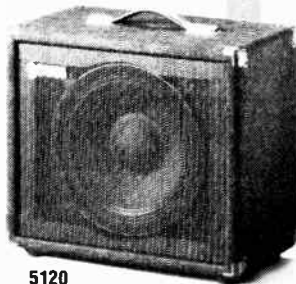
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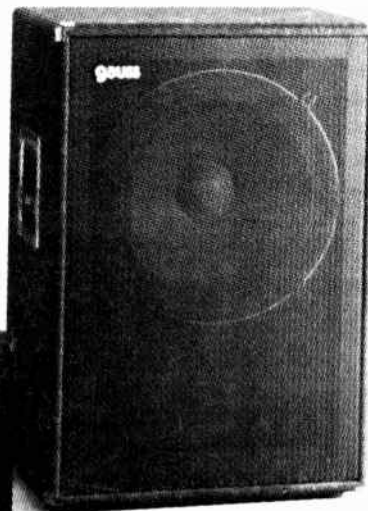
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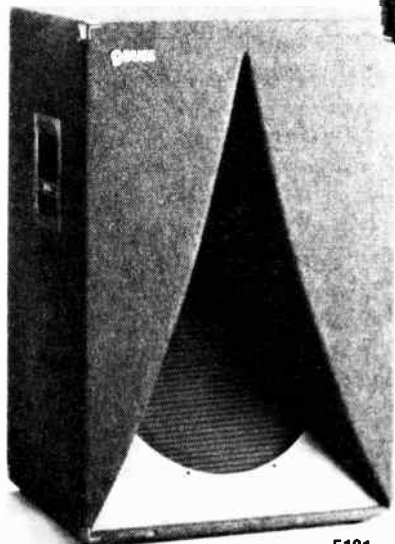


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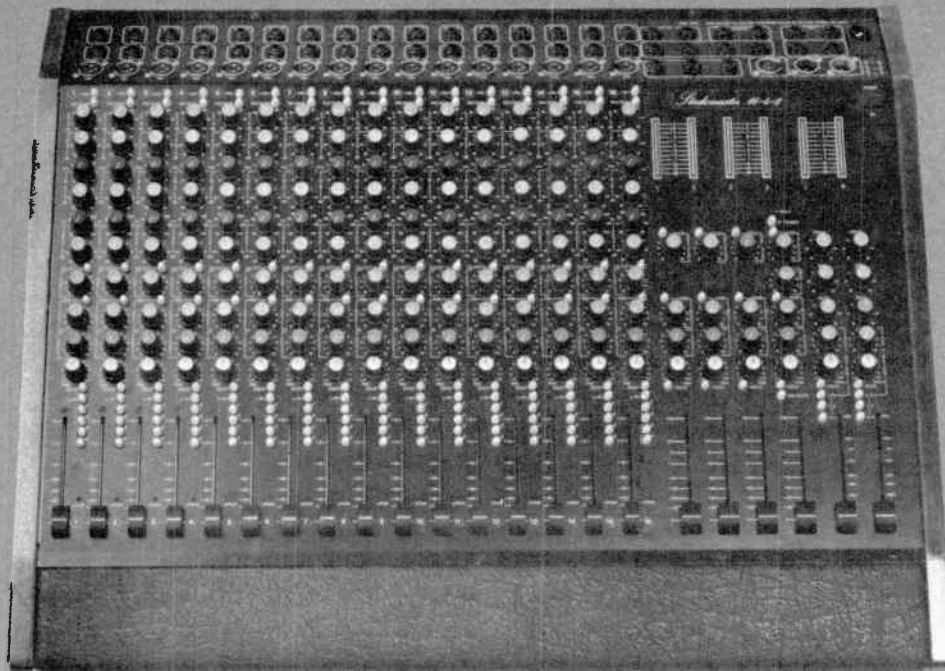
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... Continued

of the progressions to try to resolve conflicts of this kind, but it's an extremely complicated problem). Since the minor seventh is more important in terms of the harmony than the sixth, which is essentially a major triad with one added note, the choice built into most instruments is to allocate the root (and bass note) as if a minor seventh was intended (the Yamaha PS 20 and 30 are pre-programmed in this way).

The same problems arise with the

major ninth chord (which contains the same notes as a minor seventh chord with a different root) and similarly with the diminished chords, flattened ninths, and minor sevenths with flattened fifths. For this reason, when playing using an automatic accompaniment section it is as well to avoid complex chords, making sure that whenever possible the added notes (such as the sixth, flattened ninth etc) are included in the right hand part instead of the left.

(NB Some keyboards with very crude internal logic use the lowest

note played in any chord as the bass note.)

Bar-Coded Music

The fact that scores can be represented as sets of numbers in a computer's memory has been introduced several times in the earlier parts of this series, and the idea that whole chords can be represented as numbers as described above is an extension of the same concept. Once a score has been encoded there are various ways in which the resulting numbers can be permanently stored. For example, they can be recorded on cassette tape or floppy discs as described last month. Digital information can also be represented as printed patterns of parallel bars: these can be seen on many commodities found in supermarkets, the bar pattern representing a number which identifies the particular product. The numbers which comprise an encoded score can also be represented by bar-coded patterns as illustrated in Figure 3. This is the melody line of the song 'House of the Rising Sun' (as supplied by Casio for their 701 keyboard). The numbers are read into the internal computer with a 'bar-code reader' which is manually drawn across the bars as shown in Figure 4. The light and dark regions of the pattern are detected by the reader, and the relative times of the transmissions from light to dark and vice versa are compiled by the computer into binary numbers.

The Casio bar-coded music is split into three sections. The top section contains numbers which represent the pitches of the notes in the melody line. The centre section contains numbers which represent their durations. The bottom section specifies the chord sequence for the accompaniment. Separate timing information for the chords is not required because the system assumes that there are always two chords per bar.

Next Month

The next part in the series will be about computer-generated rhythm patterns, taking a look at programmable rhythm units and explaining how percussion sounds are synthesized.

Tony Horsman

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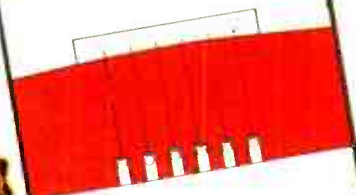
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The Polytone Mini-Brute 2 is a small, compact, very light and portable guitar combo amp with fairly basic facilities and a single, front-facing 12" speaker, front-loaded in a sealed cabinet. The cabinet size measures approximately 15½" H × 14" W × 10" D and is covered with a heavy-duty Tolex-like material called Boltflex. Power is 100 watts RMS.

The control panel is set on top of the amplifier at the rear, with lettering and controls positioned so that they are viewable from behind the amp, or from one side of it. Chrome

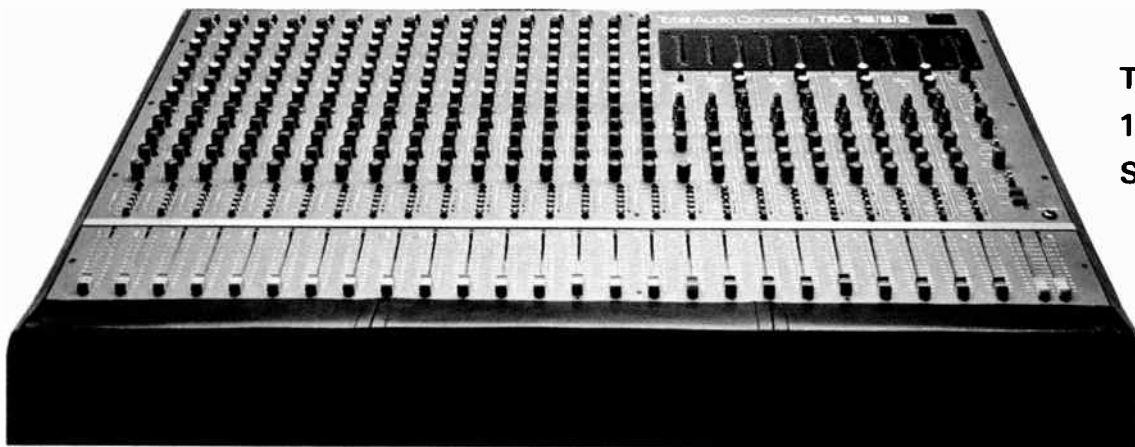
plated metal corners protect the corners of the cabinet, and a plastic carrying handle is fitted to the top. The speaker is protected by a tough plastic/nylon mesh and the actual grill material is thick, heavily sculpted foam (this seems more in keeping with hi fi gear than guitar amplifiers, but the effect is cosmetically pleasing and does not hamper the sound in any way). The control panel is finished in brushed matt black with white lettering. The knobs have a solid feeling to them and turn smoothly and evenly. The layout, from left to right, is: Power on/off switch and LED indicator;

bass; treble; volume; bright/normal/dark tone color selector; Hi and Lo inputs; reverb control. The volume control is in fact two separate controls, one set on top of the other — the top knob is a distortion/drive switch that clicks on and off, while the bottom knob is a standard volume pot. The distortion setting can be clicked in via remote footswitch plugged into a ¼" phone jack at the rear of the amp. The footswitch unit also activates the reverb control.

In use

The Mini-Brute 2 is a quiet amp.

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That's the first thing one notices upon switching on. There is a good amount of treble boost available from the amp, but this is signal boost at the treble frequencies, and so does not yield hiss — just increase treble. The bass and treble pots are boost/cut controls, and do not affect the volume when turned way down. The degree of boost provided by both is effective and enhances the sound nicely. The bright/normal/dark selector is used to color the overall tonal characteristics and is again, effective. There is plenty of volume available (surprisingly so from an amp of this small size), and a warm, dirty sustain is obtained with the correct mix of clean and distorted volume settings.

Some musical instrument amps are very wide-ranging in their tonal capabilities, but have sound characteristics which are not 'musical'. To my ear, the Polytone is an extremely 'musical' amp. The entire range of its available sounds are usable. The reverb effect is as good as any of the other amp-mounted spring units I've heard.

The main strength of the Mini-Brute 2 is that it combines excellent



quality workmanship with an incredible size-to-power ratio. The clean warm sound (excellent particularly for Jazz players) would be desirable enough on its own, but coupled to a 100 watt amp of such easily portable dimensions, really makes it a stand-out.

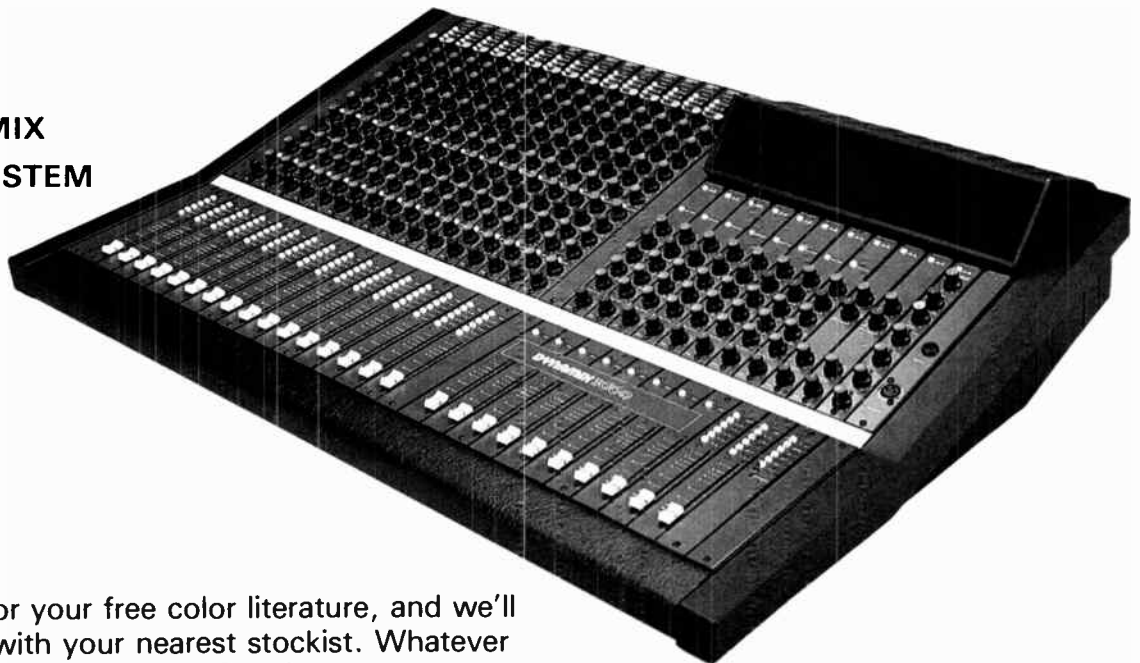
An investigation inside the cabinet

reveals it to be quite solid in construction, well-lined with acoustic material, and shielded with ample amounts of foil. The preamp and power amp are split to separate parts of the cabinet and then interconnected. The standard of components

Continued on page 72

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It's A Wrap

... of editing and mixing and all that jazz



As I expected, there was more than a bit of arguing among the musicians, producers, and engineers I gathered together for the purpose of checking out my list of the parts of the two songs mentioned at the end of last month's installment.

Some people felt that the opening instrumental was really a verse without words, while others felt it was a "intro" to "Goodbye to You". We settled on calling it an intro. The "B" part was agreed upon by all; however, some, including myself, felt it was necessary to include the cues of "instrumental", "solo", and "bridge", as well as "B-verse" for the purpose of understanding this section. The ending was considered both a tag and a vamp followed by a fade. Therefore, this song's parts should be listed thus:

Scandel's

"Goodbye To You"

1. Instrumental (same as verse) Intro.
2. First verse, "A" part (starting with "Those times...").
3. First Chorus.
4. Second verse, second "A" part (starting with "How could I...").
5. Second chorus.
6. "B" part — verse (with words, "Cause, baby it's...") then instrumental with solo. This section is also the bridge.
7. Third chorus.
8. Third verse (repeated second verse).
9. Fourth chorus.
10. Tag or vamp.
11. Fade.

The second tune, "Talk To Ya Later", although not a common configuration, was pretty much straight ahead and agreed upon by all. The only sections that needed additional explanation were the two instrumental sections (one bridge and one solo), and the ending which is a vamp on the chorus with

a guitar solo. The listing of this song's parts would therefore be:

The Tubes'

"Talk To Ya Later"

1. Instrumental intro
2. First verse or "A" part (starting with "I met her...").
3. First "B" part or "B" verse (starting with "She won't...").
4. Second verse or "A" part.
5. Second "B" part.
6. First chorus (starting with "I'll just...").
7. Third verse or "A" part.
8. Third "B" part.
9. Second chorus.
10. Instrumental — bridge
11. Third chorus.
12. Instrumental — solo
13. End vamp on chorus with solo.

So, there it is. If you didn't get it exactly right, don't worry. You'll almost always have to put few questions to the producer in order to understand his particular terminology. Now, you may be curious why I chose these two particular tunes as examples. Well, the reason is that I want you to try to edit them *together*. Right off the bat, I'm going to tell you that this will be no simple task. The two songs may sound the same feel-wise, but not only are their tempos slightly different but they are in different keys as well. Because of this, all edits have to be *on the money* or they'll be neck-snappingly noticeable. You'll have to get your hands on an open-reel tape deck, buy the two records, and get enough tape to record the two songs several times in order to accomplish this feat.

What's in it for you? A hell of a lot. Not only will you get experience in editing someone else's cues and end up with an excellent tape, but for anyone who gets it right, or even close (as this is going to be tough) I'll give you my personal letter of recommendation, along with an *International Musician & Recording World Certificate of*

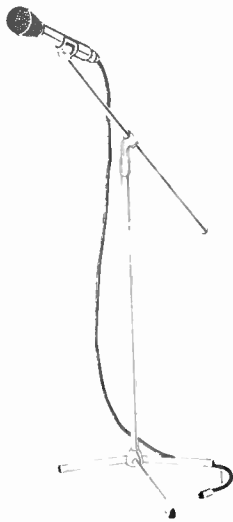
Achievement which should be very helpful in landing studio work. You'll have three months from this issue's cover date to complete this task and to send me a cassette copy of your finished product, so get to work!

Now, here are the production cues for editing *Scandels* "Goodbye To You" (hereafter, "Goodbye" and *The Tubes* "Talk To Ya Later" — hereafter, "Talk")!

Start with "Talk", cut out beginning of intro up to fourth beat of fourth bar (ricochet sound) after the first verse, cut just before the first "B" part. Come back in at the beginning of the second "B" part (beginning of bass line) and continue to the end of the first chorus. Cut at the end of the synthesizer explosion just before the words "Get out". Splice to cymbal crash (one beat before) first verse of "Goodbye". Cut after the word "say" in the line "such a pity to say", and go to second verse of "Talk", starting with the word "been".

Continue through "B" part to first chorus, again cutting after the synthesizer explosion to the kick beat just at the word "how" of the second verse of "Goodbye". Keep only the first three "goodbye to you's" of the following chorus, cut at the guitar chord and pick up the same chord in the third chorus (just before the fourth "goodbye to you"). Cut after the guitar rip sound to just before "Get out" of third verse of "Talk". After the line "I'll bitch with you", keep the two snare triplet beats and out right to the beginning of the third chorus of the same tune. Cut just before "I'll just see you around" and pick up this line from the second chorus. Continue to the end of the snare beat, just before the instrumeal section (bridge). Cut to the third chorus of "Goodbye", again keeping the first three "Goodbye to You"s. Cut to the fourth "Goodbye to You" of the fourth chorus, keeping the tag/vamp and fade, as is.

Whew! This is not going to be simple,



but all these edits *can* be accomplished and sound good. Let me give you some advice though — first make sure that the levels of both songs are recorded equally, and second instead of just trying to dive in and edit, set yourself up with all the sections in order, leaving at least a full measure before and after every place you'll be cutting. If you blow any cuts the first few times, don't give up. Try to see where you went wrong. Remember, tape is cheap so re-recording is no big deal. You've got plenty of time, so just keep at it and have patience.

This completes our discussion of editing. While a hell of a lot more could be said, I feel with this introduction you're ready to start *doing it* which is honestly the only way to learn and develop the skills you'll need to consider yourself a gun slinger.

Mixing

Now, we move on to mixing. No matter what you're mixing, the most important thing you have to deal with is separation. Let's go to frequency content — remember our discussion concerning recording different instruments which simultaneously occupy the same frequency range? Well, if this situation had occurred, now would be the time to "fix it in the mix". Many instruments *do* overlap frequency-wise, and even if they're not playing almost the same part they may often play the same note at the same time, which will cause each to mask the other out. This can often be the case with a bass line and a kick drum. It may seem like a production screw up, but very often a song's parts will develop on the spot and you may want to keep an

excellently played overdub part even though it conflicts with some other previously recorded instrument.

We're all familiar with the common graph representation of the frequency range relationships of different instruments. The number of publications which include this is so extensive that printing it here would be redundant. While graphs such as these are very helpful aids to the developing audio engineer, they should not be considered steadfast rules of placement. As an example, let's take our problem of the bass guitar and kick drum playing on the same beat. The note played by the bass guitar could be a low G — which translates to around 100Hz with our kick's resonant frequency (especially if you use an AKG D-12 mic) also around 100Hz. Every time this occurs, you won't really be able to distinguish between the two. Now the graph of relationships shows that the kick drum's frequency range extends to between 5 and 6 kHz. This may be the case for a straight-ahead sound, but in our situation adding a bit of Eq in this range may cause other conflicts. The sound of a beater hitting a skin, especially if the beater is wood and the skin is plastic actually exceeds this range. So, by our boosting the Eq a few decibels — anywhere from 8 to 10 kHz — we're adding an extra amount of this ticking sound.

When soloed, this may not be too appealing but brought up in the mix an amazing thing happens. Our brain/ear combination may hear a click, yet it does not focus in on it as such; instead it accentuates our perception of the kick's low end. In other words, you may hear the high end but it causes you to feel the low end. Our bass note, on the other hand, is full of harmonic content. This fact can also help. By boosting the bass guitar's Eq a few dB around 60Hz, you'll enable it to duck below

"Echoes can make an instrument's environment cavernous. . ."

the kick's frequency range. The end result of these two simple adjustments is a complete unmuting of our problem.

As far as applying this to, say, a piano and electric guitar's rhythm

parts the same technique holds, but obviously at different frequencies. Actually, the ranges of these two instruments are such that, depending on the notes played and considering the content of the rest of the instruments being played, you have many options as to where to place them. A couple of decibels of boost around 2kHz will make that guitar cut through anything. Try boosting a piano track up to 7kHz for added sparkle. Maybe there's space for you to add Eq at the low-mid to mid area of one of these instruments (as long as it doesn't cover the vocalist's range).

All in all, we could spend a great deal of time on frequency ranges and placement, but since instruments are not only recorded but also played differently, there can't be any real absolutes for all mixes. Get hold of a graphic representation and also start to train your ears as far as matching up sounds to their respective frequencies. Soon you'll be able to listen to a complete mix and hear holes in the frequency range that can be used in order to unclutter instruments (via boosting their content at that frequency), increasing your track's separation in the mix, and adding definition to all parts played.

Another tool used for separation is depth. By this I mean how far back or up front a track is placed. The simplest form of this is obtained with your level controls. A guitar lick laid in very quietly under a louder lead vocalist's line will make it appear to be some distance behind the singer. Time processing devices further enhance this effect. If you add reverberation to the guitar and bring it up on a different track a bit louder than the guitar itself, it'll appear that the guitar is further back in a large room while the dry vocal is right in front of your face. Echos can make an instrument's environment cavernous, while with the advanced digital reverberation units available today, the ability to have instruments in various places is almost infinite.

In addition, I'll always set up a couple of chambers (bathrooms, hallways, and even the studio itself) before a mix. Depending on the tempo of the tune as well as the time settings of my other processors, at least one or two will work perfectly. Obviously, the more places you can put things the better. For example, I've done mixes using three digital reverbs, two springs, two plates, three chambers, tape slap-back echo

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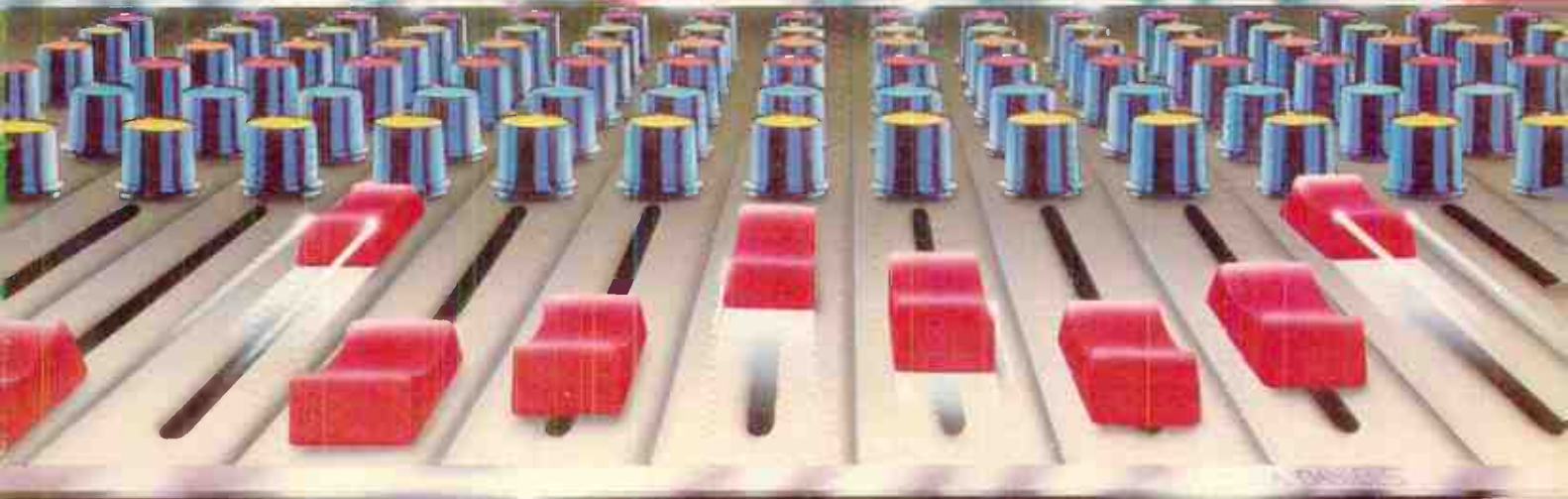
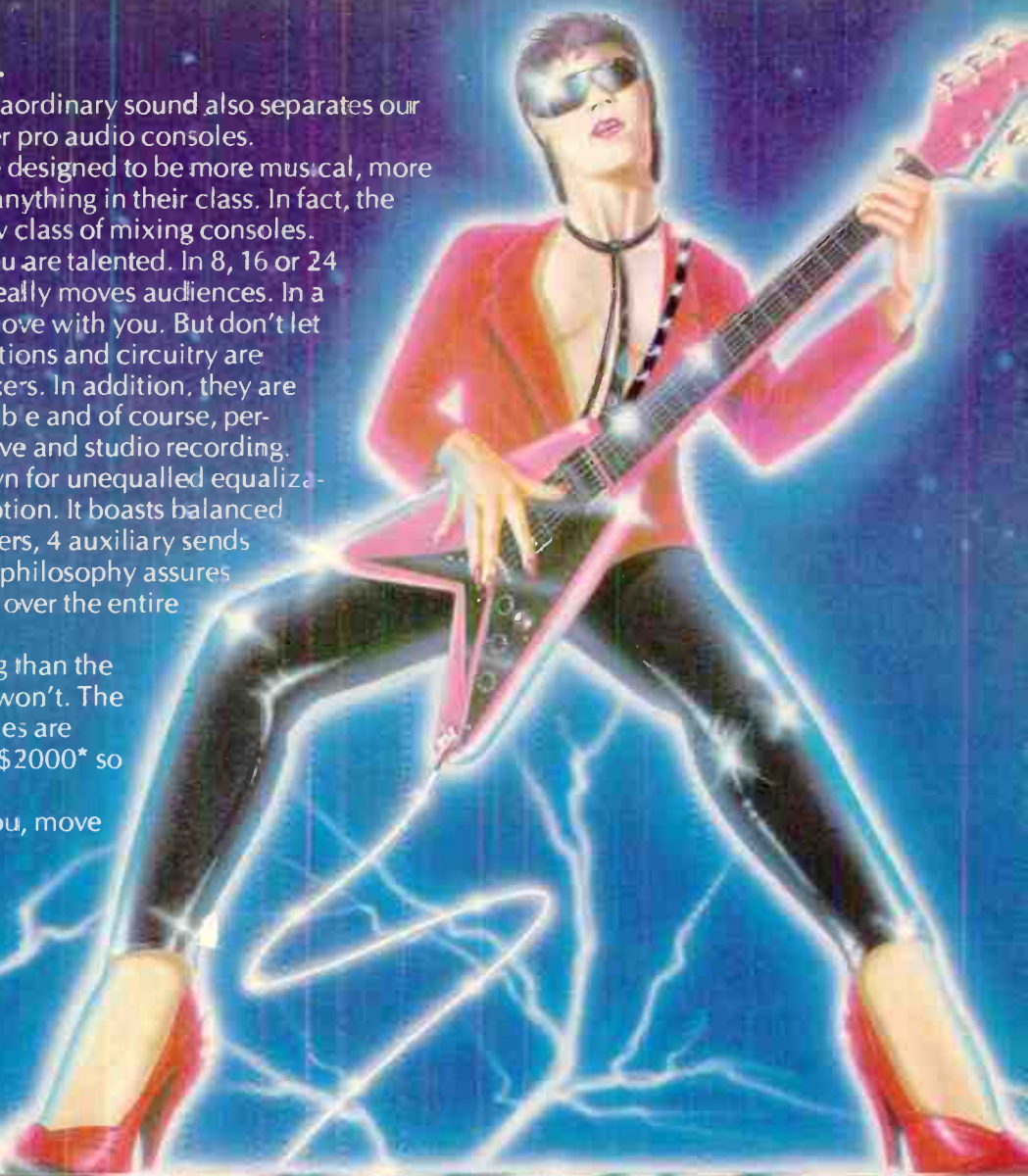
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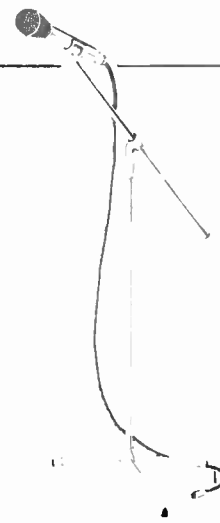
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Continued from page 66

and digital delay. The average home recordist is not going to have anywhere near this amount of flexibility, but an inexpensive spring, a three head tape deck, and speakers placed in a couple of miced up rooms should do the trick.

Finally, if you're doing a stereo instead of a mono mix, your panning positions also help with separation. Panning the piano a little to the left and the rhythm guitar a bit to the right can effectively separate the two. This is very helpful in situations where an instrument's frequency content or the content of the other instruments doesn't allow for Eq boosting in order to achieve the desired separation.

As you can see, these three techniques are not only independent tools, but also can interact amongst each other in order to achieve the desired result — a clean mix. Furthermore, all of these methods are also used for enhancement of different tracks, whether to correct or embellish the less than adequate, to stress a particular instrument or vocal, round out the entire mix, or add excitement to the piece. We'll deal with all of these in examples of actual mixes.

First example: Let's look at an eight track demo I did for a top-40 club band. Since the tape was never intended to be mastered (that is, pressed into record form) but only as an example of their playing to be sent to club owners in order to get bookings, this mix took on a rather novel approach. All recording was done in a small studio and ended up having a very tight sound. We wanted, however, to give the listener the feeling of the excitement of the band's live performance. While actually recording a live set in a club could have been accomplished technically, the advantages gained by the ability to overdub and punch-in over mistakes was more desirable.

The drum kit was recorded with the bass and was bounced down to a fairly tight stereo spread across two tracks, much the same as you'd hear at a live show. During the date all instruments were played and everyone sang, even though nothing but the bass and drums were recorded. This provided the realistic leakage of the other instruments onto the drum's mics. When all the rest of the parts were completed the song sounded as though it was performed all together, as the vocalist and guitarist wisely

refrained from excessive doubling. Now we had to bring this performance to a live club.

A couple of weeks later, the band had a date at a club which has fairly live acoustics. This particular environment is one which I could and had already duplicated artificially. We recorded the set along with the audience noises and applause and were now ready to mix them in.

The main effects send of the board was used to recreate the club's natural acoustics; in this case they were artificially duplicated by putting the dry mix through an Eq. A spring reverb, an amp speaker, and into the studio with a mic picking up the reflections off the control room window. This worked perfectly for all the instruments which normally were not going through the PA. Those that did go through the main house system, such as electric piano, bass, and vocals didn't match up with those that hadn't. These were put through an auxillary send from the board into a digital delay set around 20 msec., then back into a channel and finally through the same send as all the others.

Perfect match-up

Now everything matched up perfectly, except that the stage and PA sound were reversed when compared with the live tape. This makes sense when you think about the fact that the PA's speakers were in front of the stage. So we reversed the two sends, putting the stage sounds through the digital delay and the PA sounds directly into the Eq reverb to studio chain. Whis this done, I now synoed up and recorded some audience noises both before, and even during, the songs. We then mixed our "live" performance and later edited in the applause. This worked so well that in one case I was actually able to edit out the final chord of a song recorded in the studio and splice in the same song's ending done live with a natural mixture of applause. Nobody could ever tell the difference.

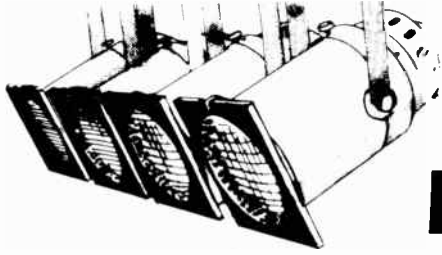
This example, while being a very simplistic type of mix as compared to the megatrack computer assisted mixes we will be dealing with, shows the amount of artistry needed by the engineer to achieve the desired results.

When it comes to mixing an actual live recording, things are different, to say the least. Now, everything is dependent on your ability to set up your mics so as to isolate them from other instruments. There'll always be a certain amount of bleed and this can make overdubbing later on anywhere from difficult to impossible. Occasionally, you'll have to mute a certain mic in order to have the overdubbed part not conflict with the original. Once this is accomplished you can now use the above mentioned method to fit this overdub into the same performance.

To accurately duplicate an acoustical environment a good understanding of reverb, decay, delay, and echo is needed in order to avoid a hit or miss approach. Listen carefully to the room's sound, the frequencies that are accentuated, how long it takes a sound to die away (decay), any doubling or flammung of the snare, slap back off the rear wall etc. I'm constantly analysing acoustics, both on the street and indoors, and when I hear something I like I'll check it out, even if by simply clapping my hands. Later when I have some free studio time I'll attempt to duplicate that particular environment using any time processing device I can get hold of. Don't quit if it doesn't work out. Use your free time to develop your own understanding of these tools. The result will be the difference between an engineer who's been trained to get a particular sound, and one with a bag full of tricks.

Next month we'll continue with mixing and go through examples of songs mixed for records, describing grouping, mutes, sends, effects, panning, Eq, levels to tape, et al.

Mike Shea



"Another Perspective"

Is your act dimming by the rest? Maybe a few 1000 watt quartz lamps, aircraft landing lights, fog and explosions is what you need

There are widely varying views on the art of stage lighting. The preceding articles in this series have been written by people who manufacture lighting equipment and controls, and whose point of view is not exactly impartial. East Coast Lighting & Sound Corporation, of which I am President, is a production company, which means that we use what we consider to be the most efficient, cost effective equipment, regardless of who makes it.

Lighting instruments

There is a tremendous variety of lighting instruments available to the theatrical community. I have chosen to mention only those that play major roles in Rock 'n' Roll touring. The PAR light (parabolic aluminized reflector) has become the staple of Rock shows. The most popular are the 8" PAR 64 and the 4" PAR 46 (both manufactured by Altman Stage Lighting, Inc., NYC). PAR 46 and 64 fixtures can be successfully mixed to light small stages, though they are ineffective in large shows. The actual focus of these fixtures is determined by the choice of lamp. PAR 64 lamps are available in 500 and 1000 watts, incandescent or quartz (brighter, lasts longer and costs about 50% more), very narrow, medium, or wide flood beam spreads; PAR 64 lamps are 200 watts, incandescent, narrow or medium beam spreads. A PAR 64 with 1000 watts lamp and pipe clamp and connector sells for about \$80.00 and a PAR 46 with a lamp and connector sells for about \$38.00. 12 24 PAR 64's is a good average club system.

Specials

Lekos or ellipsoidal spots are excellent specials to highlight a performer. They are available with a myriad of lamps and focal lengths. The only drawback is that in a club situation, the lighting director very rarely has any control over how far away from the stage the specials are hung, and Lekos are not very effective if they are used much closer or further away than their focal length dictates. 3 1/2, 6 8, and 12 6 x 12 with 500 watt lamps are the best units for club situations.

The addition of a followspot is always a good touch. There are about a hundred on the market now, but we can reduce the list to three that are best suited to small halls. The Altman Q1000 which sells for about \$650.00 with a lamp that has a 6 color boomerang and gives good output up to about 100' away. The Phoebus Ultra quartz sells for about \$800.00 and is good up to 125'-150' away. The last is the Altman Satellite I, which has a 6 color boom and has a throw of 200'. It is the smallest in the family of followspots that uses a 575 watt HMI lamp and carries a price of about \$2800.00.

Dimmers

Today's more advanced lighting systems require low voltage remote controls which means that the dimmers are kept near the stage and are connected to the console in the audience by a cable carrying only a small control voltage. We have found that the most cost effective system is a console by Lighting Methods, Inc. (get the bump button option), and small dimmers (6 channels at 1.2KW

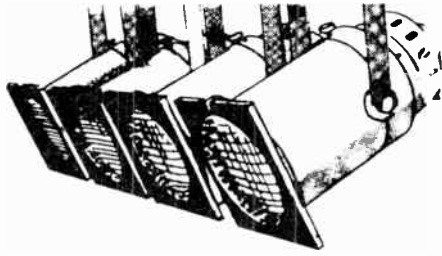
per) by LMI (about \$800.00 ea.) and larger ones (6 channels at 2.4KW or 7.2KW per) by Theatre Techniques, Inc. Both of these companies manufacture modular dimming systems which means that if a channel malfunctions, that channel can easily be replaced without taking the whole pack out of service. Replacement cards are only about \$175.00 and should be carried. This may seem like more money than the average act can afford, but you are assured of a professional show everytime.

Power

Power distribution is another very important part of the system. It provides protection to the dimmers in case power is incorrectly connected. Since most dimmers require 10, 220 VAC power input, it is not simply a matter of finding an unused outlet. The house should be equipped with a 220 Volt disconnect on or near the stage; if there is no disconnect, you will have to tap into the house panel directly below the main breaker. Do not tap in line — always shut the breaker down before tapping in. Many techs like to use large alligator clips for power because it is quick and easy, but it doesn't provide a very sound connection, and a clip can easily be pulled off or knocked into another with disastrous results. Feeder cable should have bare ends and should be attached to the power source with set screw connections.

Accessories

Cable and cases are the two most neglected parts of any system. The rule in both cases is the same; don't scrimp! Those orange extension cords



that K-Mart sells are out. Go to the local electrical supply house and get some 14-3 5J and install your own connectors. All equipment should travel in road cases; they extend the life of the equipment, and equipment in a case is less likely to be misplaced or stolen.

Time is money, and the quicker lights can be set up and torn down, the better. Whenever possible, fixtures should be bolted to pieces of unistrut and hung together. A good investment is sure clamps, which are pipe clamps with a ratchet mechanism that allows the clamp to be adjusted without tools. Cables should be snaked together to correspond with add-on bars. Stay away from homemade trussing; too many trusses are made to look like what someone saw in an arena show with no regard for structural integrity. The small stage lighting system should adhere to the same rules as large systems. It should adapt to different size rooms, go up and come down easily and pack in a minimum of truck space.

A word on design

There are two schools of thought about designing a lighting system. The first is to do the design first and worry about the cost later; the second is to get the budget first and design the show around that framework. There is always something less expensive than what I have suggested, but it won't perform as well and/or as long. Don't be discouraged if the cost of quality equipment seems prohibitive. Most equipment can be rented weekly for approximately 3-5% of its retail value.

Extras

One of the newest and most exciting developments in the lighting industry is the use of aircraft landing lights. A set of four of these 250 watt lamps produces brilliant shafts

of light in excess of 1,000,000 candlepower. The lamps fit standard PAR 46 and PAR 64 cans and a set of 4 PAR 46 ACL's with lamps and 110V adapter sells for about \$250.00.

Special effects

While not exactly *lighting*, the burden of special effects generally falls on the shoulders of the lighting tech. The two most popular effects in Rock 'n' Roll are fog and explosions. The fog effect can be produced by a chemical mixture of dry ice and hot water. The chemical approach is neater and takes less preparation, but the effect is not as convincing. The Rosco fogger is excellent for this application; the fog effect produced by dry ice dumped into hot water is unbeatable. A 55 gallon Fog-It is the best machine for the money — remember the more surface area of dry ice that comes in contact with the water, the more fog produced. We found that putting a block of dry ice into a burlap bag and crushing it with a hammer into powder and then placing it into the machine, bag and all, worked the best. Pyrotechnics is not a subject to be taken lightly. I have seen flash pots made out of everything from hockey pucks to coffee cans. The safest system is manufactured by Luna Tech, Huntsville, Alabama. Don't make your own pots — this is dangerous. Buy them from a reputable manufacturer and practise before the show — make all your mistakes outside.

Lighting is one of the most important ingredients of the show. It can make it or break it. Live Rock 'n' Roll is essentially a visual art. East Coast has worked with such diverse acts as Rev. James Cleveland's Gospel show, Kitty Wells' Country Western shows, Joe Perry Projects, Starz, and the Romantics. We are always available to answer questions about products or procedures recommended herein; write to *IM&RW* with any you may have.

Michael Warmuth

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...Continued

and layout seems very high. The cabinet itself is plywood, and the back plate composite particle board.

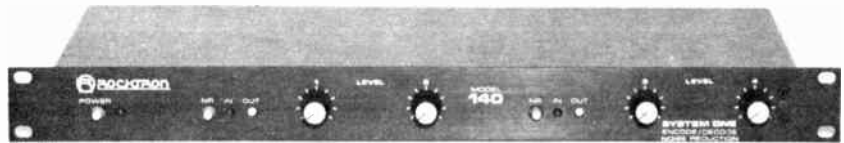
The amp comes with a comprehensive booklet explaining the concept and development of the Polytone, plus a few pages outlining typical uses and settings.

Incidentally, although I have reviewed the Mini-Brute 2 as a guitar amp, one of the meanings of Polytone (as defined in their booklet) is 'more than one sound' — i.e., the Polytone is intended for use with more than one instrument (although not simultaneously, of course, as it is only a single channel amp).

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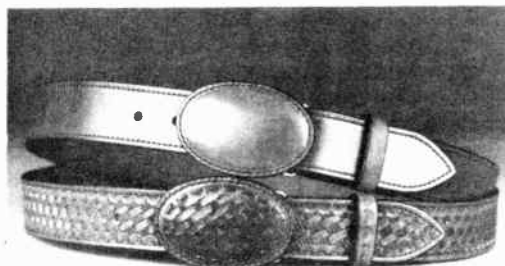
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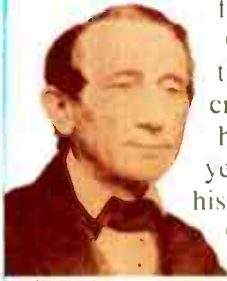
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