

AUGUST 1976 \$1.50

IN THE RECORDING STUDIO WITH THE PROS

# HIGH FIDELITY

and musical america

## Tape Issue

Weighing the Evidence...

### Tests of Twenty-One C-90 Premium Cassettes

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**The most  
extraordinary  
cassette deck  
value ever  
offered.**







REC



TAPE DOLBY NR  
BIAS EQ



PHONES L—MIC—R



INPUT  
LEFT—RIGHT



**PIONEER** STEREO CASSETTE TAPE DECK MODEL CT-F2121

not set by the individual Pioneer dealer at his own option.



# The new 2121. With

Ever since the cassette deck stepped into the spotlight with proven high fidelity performance, great advances in tape and cassette deck technology have been made. Despite this progress, most of the high fidelity industry was convinced that it was virtually impossible to build a really superior front-loading, front-control cassette deck equipped with Dolby — that could sell for less than two hundred dollars.

Pioneer thought it might be impossible, too. But we figured it was worth the try.

The engineers at Pioneer were given the 2121 project two years ago. They were asked to build a front-access, front-control cassette deck loaded with features. A deck that would outperform any unit in the two hundred dollar price range that had ever been built before.

The result is the no-compromise CT-F2121 — a cassette deck with enormous capability, performance, reliability and features. Pioneer believes the CT-F2121 has the greatest combination of value ever put into a cassette deck at such an extremely reasonable price.



Switch from one mode to another, bypassing the Stop lever.

## Everything's up front for optimum operating convenience.

Pioneer's engineers have designed the CT-F2121 to give you the highest degree of flexibility in use. You can stack it easily with other components in your system because every control function, as well as cassette loading, is operable from the front panel. In addition, the illuminated cassette compartment permits rapid cassette loading at an easy-to-see 30° angle. An LED indicator lets you know when you're in the recording mode. And, as all Pioneer components, the controls are simple to use and logically arranged.

## Improved sound reproduction with built-in Dolby B system.

The CT-F2121's selectable Dolby B provides as much as 10dB improvement in signal-to-noise ratio with standard low noise tapes. There's an even greater improvement with chromium dioxide tape. An indicator light tells you instantly when the Dolby system is in operation. And to insure better, interference-free recordings of FM stereo broadcasts, Pioneer has built in a multiplex filter.

## Outstanding performance with every type of tape.

Separate bias and equalization switches permit you to use any kind of cassette tape: standard low noise, chromium dioxide — and even the newest ferrichrome formulations. The CT-F2121 brings out the fullest capabilities of each tape. And to produce the best performance, the operating manual of the CT-F2121 gives you a chart listing the most popular cassette tape brands with their recommended bias and equalization control settings. *There's never any guesswork.*



Separate bias & equalization switches for any type of cassette tape.

## Versatile features increase listening enjoyment and simplify recording.

Pioneer has outdone itself on the CT-F2121 with a host of easy-to-use features. A long life permalloy-solid record and play head and a ferrite erase head insure excellent signal-to-noise ratio. The transport operating levers that permit, direct, jam-proof switching from one mode to another without having to operate the Stop lever, are a great advancement. And, like Pioneer's more expensive cassette decks, the CT-F2121 has a separate electronic servo-system and a solenoid that provides automatic stop at the end of tape travel in play, record, fast wind and rewind.



# Dolby\* under \$200.†

Twin illuminated VU meters, plus separate input level controls for each channel help you set accurate recording levels. Stereo microphone inputs as well as the headphone output jack are all easily accessible on the front panel.

By any point of reference, compare the CT-F2121's combination of performance and features with cassette decks costing much more. You can come to only one conclusion — at under \$200†, this is the most extraordinary cassette deck value ever offered.

**Frequency Response (Chrome Tape):**  
30-16,000 Hz

**Wow & Flutter (WRMS):** 0.12%

**Signal-to-Noise Ratio (with Dolby):** 58dB

**Input Sensitivity:** 0.3mV — 63mV (mic);

63mV — 12V (line)

**Outputs:** 450mV (line & DIN); 80mV 8 ohms (headphones)

U.S. Pioneer Electronics Corp.,  
75 Oxford Drive, Moonachie,  
New Jersey 07074.

West: 13300 S. Estrella, Los Angeles  
90248 / Midwest: 1500 Greenleaf,  
Elk Grove Village, Ill. 60007 / Canada:  
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CIRCLE 26 ON READER-SERVICE CARD



The CT-F2121 comes ready for custom installation. Handsome, optional cabinet with walnut veneered top and sides also available.

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when you want something better



\*Dolby is a trademark of Dolby Laboratories, Inc. †(Optional cabinet with walnut veneered top and sides. Approximate value, \$24.95.) Prices listed above are manufacturer's suggested retail prices.



# What is your first component?

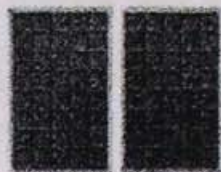
Is it your receiver?



Your Turntable?



Your speakers?



or is it your cartridge?



We have become convinced that it really is your phono cartridge, even though we have been modestly advertising it for the past few years as your *fourth*.

Let's face it, the cartridge is that important *first* point where the music begins, and if the stylus cannot follow its path accurately, no amount of expensive equipment . . . speakers, turntable or receiver . . . can make up for the distortion it can produce. That is why you need a cartridge you can depend on. One that's the best your money can buy. Specifically, a Pickering:

**Because** a Pickering cartridge has the superior ability to "move in the groove", from side to side and up and down, without shattering the sound of your music on your records.

**Because** a Pickering cartridge possesses low frequency tracking ability and high frequency tracing ability (which Pickering calls traceAbility™). It picks up the highest highs and the lowest lows of musical tones to reveal the distinctive quality of each instrument.

**Because** Pickering offers a broad range of cartridges to meet any application whether you have an automatic record changer, or a high quality manual turntable, a stereo, or a 4-channel sound system. Your Hi-Fi dealer will be able to recommend a Pickering cartridge that is just right for your system. Your stereo cartridge is the *first* part of your music system. It is too important to overlook, and so is a Pickering.



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"for those who can hear the difference"

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AUGUST 1976

VOLUME 26, NUMBER 8



# HIGH FIDELITY

and musical america

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## Pioneer Project

This summer the U.S. Pioneer Electronics Corporation embarked on a program to help the New Jersey Symphony Orchestra, which if it proves successful may also benefit the Metropolitan Opera. For years the high fidelity equipment manufacturer located in Moonachie, New Jersey, has been contributing an annual \$10,000 to the state's major symphonic ensemble. Still, the New Jersey Symphony has remained in a financial situation that has become common for cultural institutions—troubled.

Last March, Bernie Mitchell, president of Pioneer and a member of the orchestra's board of directors, devised a plan that is expected to triple Pioneer's financial assistance. For the past few months the firm has been approaching all New Jersey high fidelity dealers (with the exception of the large department stores—they can afford their own philanthropic programs) through a series of letters, offering to match any contributions they make to the symphony dollar for dollar. Mitchell anticipates raising some \$10,000 from the dealers, which with Pioneer's matching contribution and its regular yearly gift will put \$30,000 into the orchestra's bank account.

If the program succeeds, Mitchell hopes to extend it to every high fidelity dealer in the country this fall, with the recipient this time being the Metropolitan Opera. With this more ambitious national project, Pioneer anticipates collecting about \$125,000 from dealers, which with its matching grant will provide the Met with an additional quarter of a million dollars. (I asked Mitchell what will happen to the Met project if the New Jersey project proves too successful—if some generous Hoboken dealer forces Pioneer to match, say, a million-dollar contribution. He thought a moment, smiled, and replied: "Maybe I'll ask the orchestra to change its name.")

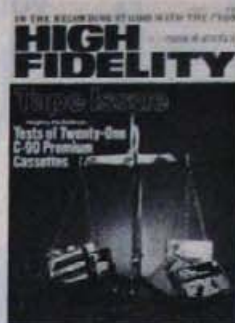
What can Pioneer expect to gain from its largesse? First of all, I trust, the gratitude of music lovers, today in New Jersey, tomorrow the world. (The Met is, after all, an international organization; American opera buffs would feel grateful to anybody who helped save La Scala.) Second, as this editorial exemplifies, some well-deserved publicity. And publicity at the important "point-of-sale," at least in New Jersey for now, since the company will provide trophies, plaques, and certificates for the contributing dealers to display proudly, even if they don't sell Pioneer products. Frankly, I hope that Pioneer can get that publicity in every high fidelity store in New Jersey.

Third, I think, there will be a sense of pride in aiding a worthy cause and a musical genre that is vital to the high fidelity industry. I surmise a fourth: the satisfaction of forcing the government to contribute more to cultural institutions. One continually hears complaints that our various governmental levels are not doing enough to support the arts. Pioneer is putting its money where others' mouths are. Although about half of the company's, and the dealers', contributions are coming from their stockholders' pockets, the rest of this "business expense" comes out of taxes. Here, to be sure, is the best means to increase the government's contribution to music while avoiding any possibility of governmental influence: Give, yourself.

Finally, as Victor discovered in the early days of the audio industry, when the recordings of Caruso helped make the Victrola almost synonymous with the phonograph, there is a certain benefit to a manufacturer who takes advantage of the prestige that an association with the classics can bestow upon his products. Whatever else classical music may contribute to the high fidelity industry, it certainly confers the element of class.

So, good luck to Pioneer in its present program. And to any other generous manufacturers filling in for the Prince Esterházy and Otto Kahns of bygone days: These pages are open to publicize your efforts too.

*Leonard Marcus*



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Roy Lindstrom

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It's one thing to produce components with an impressive list of published specifications. It's quite another matter to ensure that every unit will meet or exceed each of those specifications. But this is precisely what LUX does with its entire line of power amplifiers, preamplifiers, integrated amplifiers and tuners.

LUX components were conceived and designed for that very special breed of audiophile whose critical requirements for accurate music reproduction are met only by separate amplifiers and tuners. And of those products, the very best that the state of the art can provide.

Hence, the following procedure takes place at our facilities in Syosset, New York.

Every unit received from the factory in Japan is removed from its carton and placed on a test bench where it is connected to an array of test equipment, which includes a Sound Technology 1700A Distortion Measurement System and 1000A FM Alignment Generator, McAdam 2000A Digital Audio Analyzer System, and Iwatsu Electric SS5100 and 5057Z Synchroscope.

Every control, switch, meter and indicator undergoes an operational check-out. There's nothing unusual about this. Any reputable manufacturer can be expected to do the same. Or at least spot check a shipment.

But LUX has only begun. Every specification is then measured against its published rating. That means 14 individual tests for a power amplifier, 14 for a preamplifier, 20 for an integrated amplifier and 7 for a tuner.

Each verified specification is entered by hand on a Performance Verification Certificate. Any unit that doesn't

match or exceed every published specification is given the appropriate remedy. When a unit passes, it is returned to its carton together with a copy of the Certificate for the information of its future owner. Another copy stays with us as a permanent record.

As for the specifications themselves, here are some examples. The Luxman M-4000 power amplifier has no more than 0.05% total harmonic distortion at any frequency from 20 to 20,000 Hz, even with both channels driven simultaneously to its rated output of 180 watts per channel minimum continuous average power into 8 ohms. Another M-4000 specification: signal-to-noise ratio beyond 100 dB.

Another example is the C-1000 preamplifier. Its phono-input circuits are virtually overload proof, accepting almost half a volt of audio signal at 1000 Hz. The distortion of its phono-preamplifier circuits is an astonishingly low 0.006%, and the rest of the preamplifier circuits add only 0.001% more.

There's one more expression of our confidence in our products. If any of them malfunctions during the first three years, let us know. We'll not only fix it promptly, but will pay the freight both ways, as well as supply a shipping carton if needed.

Some day, all manufacturers may adopt these procedures. For LUX, it's the only way to go. From the very beginning.

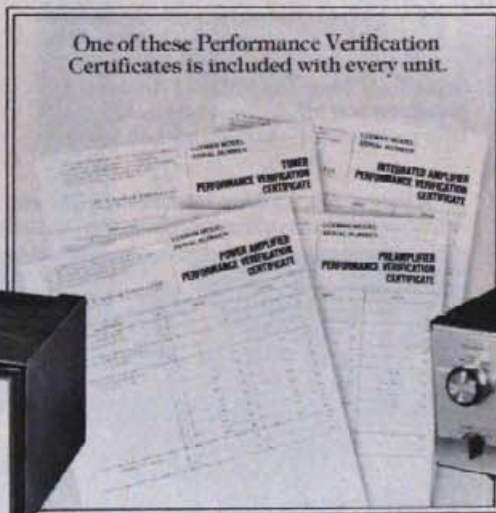
With all this, we think that neither our specifications nor our procedures for verifying them is nearly so important as your satisfaction with the end result: the most accurate and musical reproduction you can hear.

The end result can be best appreciated at a select number of dealers whom we guarantee to be as dedicated to fine music reproduction as we are.

One of these Performance Verification Certificates is included with every unit.



**Luxman M-4000 Power Amplifier**—180 watts per channel minimum continuous power, both channels driven simultaneously into 8 ohms. Total harmonic distortion no more than 0.05% at any frequency from 20 to 20,000 Hz. Frequency response: 5-50,000 Hz,  $\pm 1$  dB. Signal-to-noise ratio: 108 dB. Features include: separate power supplies for each channel, including output and drive stages. Two-meter power-output display in combination with LED peak-output indicators reveal dynamic range of program material. Output level set by precision potentiometer with 1-dB click stops. \$1,495.



**Luxman C-1000 Preamplifier**—Total harmonic and intermodulation distortion: 0.007% at 2.5 V, 20 Hz-20 kHz, all output signals. Frequency response: 2 Hz-80 kHz, +0, -0.5 dB. Signal-to-noise: >65 dB. Phono overload: 450 mV @ 1 kHz, 3.5 V @ 20 kHz. RIAA equalization:  $\pm 0.2$  dB. Features include: tape-monitoring and dubbing for two decks, six selectable tone control turnover frequencies, linear equalizer, twin high and low noise filters, variable phono-input impedance, variable input sensitivities, "touch-mute" attenuator, speaker selectors. \$895.

## LUX Audio of America, Ltd.

200 Aerial Way, Syosset, New York 11791  
In Canada: AMX Sound Corp. Ltd., British Columbia; Gentronic Ltd., Quebec



rilege that is compounded when the names of De los Angeles and Farrell are introduced as well. Calling her voice "one of the natural wonders of the age" is tantamount to an endorsement of whining. Can Glenn Gould really have been listening?

Ralph Latimer  
New York, N.Y.

I was taken aback to read that a master of the classical keyboard such as Glenn Gould would compare "Classical Barbra," Barbra Streisand's venture into the classics, with those of Elisabeth Schwarzkopf. Imagine Streisand singing the Marschallin in *Der Rosenkavalier* or attempting a highly sophisticated art song like Mozart's "Das Veilchen." Hearing her "singing" (warbling is more like it) of Handel, Schumann, and Wolf has been quite enough for me. She covers—to borrow from a great writer of aphorisms—the gamut of emotions from A to B. Although in the popular repertoire Streisand has a personal style that is widely admired, her classical efforts are more on the level of Florence Foster Jenkins.

Some classical artists—Beverly Sills, Helen Traubel, and Ezio Pinza, to name a few—have had success in the popular field, but few popular artists (in fact, name one!) have made the reverse transition. One is reminded in Streisand's case of a German proverb that counsels a shoemaker to stick to making shoes.

Paul Samuel  
Dobbs Ferry, N.Y.

Glenn Gould's comments on Barbra Streisand's classical album prove that as a record reviewer he is one hell of a pianist.

Hugo Maxwell  
New York, N.Y.

## More on the Anniversary

Your twenty-fifth-anniversary issue (April) was a delight beyond words.

Ted Wick's article on movie soundtrack recordings was of particular interest, but it does contain one major error with regard to the first commercial soundtrack album. Miklós Rózsa's *Spellbound* score recorded on ARA Records (later transferred to LP by Remington Records, something the author fails to note) was predated, ironically enough, by the same composer's *The Jungle Book*, with Sabu as narrator.

That score, issued on RCA Victor M 905, is the first American film-music album. The first commercial album of film music was "Things to Come," issued in the late Thirties on English Decca 78s, conducted by Arthur Bliss and Muir Mathieson.

John Steven Lasher, President  
Entr'acte Recording Society  
Chicago, Ill.

Mr. Wick replies: I am somewhat surprised to learn that the British issued a movie-music album in the Thirties. Their foreknowledge that they were stealing my idea before I had a chance to use it is obvious even in the title, "Things to Come."

I am smarting for "failing to note" the obscure information that our original ARA 78-rpm "Spellbound" album was "later transferred to LP by Remington Records." If Remington, of which I have never heard,

# Is it live, or is it Memorex?

The amplified voice of Ella Fitzgerald can shatter a glass. And anything Ella can do, Memorex cassette tape with MRX<sub>2</sub> Oxide can do.

If you record your own music, Memorex can make all the difference in the world.

**MEMOREX** Recording Tape.  
Is it live, or is it Memorex?



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CIRCLE 20 ON READER-SERVICE CARD



# Some reasonably unbiased suggestions on how to select your next record player.

Since you read this magazine, chances are you already own a record player. If you're considering replacing it, it probably no longer meets your requirements. One way or another.

For example, if your turntable operates only manually, you may now prefer the convenience and safety of automatic operation. If it already provides automatic start and stop, but only in single play, you may now want the ability to play a series of records in sequence and without interruption.

You may also be taking an expensive risk with your records every time you play them. Remember: your record collection probably costs more than the rest of your equipment combined. This alone should prompt you to give thought to a new turntable.

For years, Dual's approach has been to build every turntable with more precision than your records are likely to need. Since we traditionally lead the state of the art, every Dual tonearm produces optimum performance from today's finest cartridges and maximum longevity from every record.

This is as true of the least expensive Dual, the 1225, as it is of the CS701. All Dual tonearms, for example, follow the same basic design principles: straight line between pivot and cartridge for maximum rigidity and lowest mass; dynamic balance maintained throughout play; stylus pressure applied around the vertical pivot; anti-skating that automatically compensates for the inherent changes in skating during play.

As for rumble, wow, flutter and deviation from speed accuracy, all are far below audibility in every Dual. (With the direct-drive CS701, they are virtually unmeasurable.)

We don't suggest that Dual is the only quality brand turntable available. But where Dual does indeed stand alone is in the many years of proven reliability and durability. For example, many Duals that come in for servicing (usually only for lubrication and cleaning) are more than ten years old. And many Dual owners tell us (via letters and warranty cards) that they now own their second Dual... usually for their second system.

Dual quality comes in a variety of models: semi-automatic, single-play; fully automatic, single-play; single-play/multi-play. Seven models in all as described. We think it only reasonably biased to suggest that you will find your next turntable among them.



Dual 1225.



Dual 1249.



Dual CS701.

**Dual 1225.** Fully automatic, single-play/multi-play. Viscous damped cue-control, pitch-control. 10%<sup>9</sup> platter. Less than \$140, less base.  
**Dual 1226.** with cast platter, rotating single-play spindle, less than \$170.  
**Dual 1228.** with gimballed tonearm, synchronous motor, illuminated strobe, variable tracking angle. Less than \$200.

**Dual 1249.** Fully automatic, single-play/multi-play. Belt drive. 12" dynamically-balanced platter. Less than \$280, less base. Full size belt-drive models include: Dual 510, semi-automatic, less than \$200; Dual 601, fully automatic, less than \$250. (Dual CS601, with base and cover, less than \$270.)

**Dual CS701.** Fully automatic, single-play. D.C. brushless, electronic direct drive motor; tuned anti-resonance filters. Less than \$400, including base and cover.

United Audio Products, 120 So. Columbus Ave., Mt. Vernon, N.Y. 10553  
Exclusive U.S. Distribution Agency for Dual

**Dual**



paid proper royalties, well and good. If not, I shall welcome a copy of "Spellbound" for keeping my mouth shut.

When film music is used to underscore narration, as presumably it must have been in the "Jungle Book" disc to which Mr. Lasher refers, can one label such a recording purely a "motion-picture" album? I think not. Certainly Mickey Rózsa made no effort to restrain our group from claiming "Spellbound" as the first album of motion-picture music.

After all these years I suppose it really isn't that important, and at my age who really cares what we did? But John T. Mullin's piece on the advent of tape recording (April) carries on all the old myths. The facts are:

(1) The first broadcast model of the Magnetophon was found at Radio Luxembourg, by me.

(2) The first K4 (portable broadcast) model was shipped to the U.S. by me in October 1944.

(3) The first technical articles were written by me in November 1945.

(4) We broadcast via Magnetophon from Radio Luxembourg long before Radio Frankfurt was captured; indeed, I acquired two Magnetophons in the Netherlands at Hilversum, before Frankfurt fell.

(5) I had a K4 Magnetophon (30 ips tape speed) in my home for many years, with German operas and the Berlin Philharmonic on reels of tape.

Don v. R. Drenner  
Coffeyville, Kan.

If Mr. Drenner will look back at Mullin's article, he will see that the author asserts only that he was the first to stage a public demonstration of the Magnetophon in the United States—at a meeting of the San Francisco chapter of the Institute of Radio Engineers on May 9, 1946. Furthermore, far from being an exercise in claim-staking, the article was principally concerned with the use the author made of the machine he had retrieved so fortuitously in Frankfurt.

Contradictions of fact are to be found in Nicolas Slonimsky's references to Serge Koussevitzky's young assistants at Tanglewood—Eleazar de Carvalho and Leonard Bernstein—in the article "1951: A Classical Scrapbook" (April).

Koussevitzky's plans for Carvalho were to build up the Rio de Janeiro Orchestra and to help develop musical culture in Carvalho's own country. With this intent, in the autumn of 1949, he spent a month in Brazil, conducting for three memorable weeks in Rio, with Carvalho as his assistant.

For Bernstein, Koussevitzky's dream was to have his first Berkshire Music Center student conductor become an associate director at Tanglewood. It should be remembered that at the close of his (unprecedented) twenty-fifth season in Boston (1949) Koussevitzky resigned as conductor of the Boston Symphony, but not as director-founder of the Berkshire Music Center. "Tanglewood," he announced, "is my child—my tears and my great joy..."

On June 3, 1951, Bernstein flew from Mexico to spend the evening with "Sergei Alexandrovich," discussing the forthcoming season and planning for the future of Tanglewood. It was the last evening of Koussevitzky's life.

It is worthwhile also to correct the imputation that Koussevitzky's double-bass concerto had been composed by his friend Reinhold Glière. Since the 1900s, Koussevitzky's name as a double-bass virtuoso ranked with those of Kreisler and Casals on their instruments. In order to fulfill his engagements, he transcribed and composed short works with piano accompaniment. To keep the record straight, I should like to quote from the volume *Contrabass: History and Method*, issued in

Moscow in 1974. The article dedicated to Koussevitzky gives a detailed account of this major composition in the double-bass repertoire. It also refers to the fact that the young virtuoso approached for the orchestration of this work a professional composer, his friend and colleague Glière. Together they worked on the orchestration of the concerto. The review of the first Moscow performance described the concerto as a work "revealing the melodic as well as the technical possibilities of the double bass in the superlative performance by its author" (italics mine).

Mrs. Serge Koussevitzky  
New York, N.Y.

I am astonished by Nicolas Slonimsky's

## Looking for an ultimate standard of listening?



Many hi-fi enthusiasts bought a Crown DC-300A power amplifier because they were impressed by its performance specs, and by the quality of its "listening" performance. It was, for them, the "ultimate" amplifier.

Why not do what they did? Compare the specs for the Crown DC-300A with those of any other amplifier. Compare the clean,

pure DC-300A sound that comes from low-distortion circuitry and plenty of headroom. And especially compare the DC-300A with its smaller relatives, the Crown D-150A and D-60. Same clean, pure sound, less power, but maybe just what you need.

Use your own judgment. You could find your ultimate listening standard in Crown.

**DC-300A Stereo Amp**  
155 watts per channel min.  
RMS into 8 ohms  
(1-20,000 Hz), no more  
than .05% total  
harmonic distortion.

**D-150A Stereo Amp**  
80 watts per channel min.  
RMS into 8 ohms  
(1-20,000 Hz), no more  
than .05% total  
harmonic distortion.

**D-60 Stereo Amp**  
32 watts per channel min.  
RMS into 8 ohms  
(20-20,000 Hz), no more  
than .05% total  
harmonic distortion.

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conclusion about the benefaction that Serge Koussevitzky bestowed upon the Library of Congress. We are most grateful (as Mr. Slonimsky indicates) to the conductor for the creation of the Serge Koussevitzky Music Foundation. It preceded his death, however, by nearly two years, and records of negotiations for it go back to 1948.

Even before that date Koussevitzky had close relations with the Library of Congress, and on April 24, 1933, he conducted a chamber orchestra at a festival in the Coolidge Auditorium. As the years passed, and as he thought more and more about institutionalizing his philanthropy, he broached the subject to Harold Spivacke, then Chief of the Music Division. There was an immediate meeting of minds, and several discus-

sions took place subsequently. The first formal gathering in which Mr. Spivacke took part was in March 1949. By the end of that year the Foundation was in existence and handsomely funded, and the inaugural concert occurred on January 21, 1950. Koussevitzky was present on that occasion and graciously responded to the introduction and remarks made by the Librarian of Congress, Luther H. Evans.

It is an egregious error to suggest that our Koussevitzky Foundation resulted from a fit of spite on the part of a great conductor. But I insist on one thing—we are and ever shall remain grateful!

Edward N. Waters  
Chief, Music Division  
Library of Congress

Nicolas Slonimsky's "1951: A Classical Scrapbook" contains a lamentable oversight. Lotte Lehmann ended her recital career (she had said farewell to the Met in the '40s) on Feb. 16, 1951, at a concert in Town Hall in New York City—recorded and for a time generally available. As she ranks with the greatest, she surely deserves mention.

Richard G. Mason  
Honolulu, Hawaii

The April article "1951: Pop Music at the Crossroads" really rang the bell for this hopelessly addicted music buff. That was the year I got hooked on the stuff, at age fourteen. This delightful article articulated superbly a very special period in popular music as no one else has yet done.

So well did John McDonough present the era that I'm tempted to overlook his crediting the Four Aces with the Four Lads' hits "Moments to Remember," "Standing on the Corner," and "Istanbul."

Glenn Atchison  
Toronto, Ont.

### The First Mahler Second

In "Letters" for May, David Wilson says that the first recording of Mahler's Second Symphony was made by Eugene Ormandy and the Minneapolis Symphony Orchestra for Victor. Actually, the first recording was made back in the 1920s by Oskar Fried and the Berlin State Opera Orchestra for Polydor. Fried's orchestra is joined by the Berlin Cathedral Chorus with Gertrud Bindernagel, soprano, and Emmi Leisner, contralto, who gave a memorable performance of the *Urlicht*.

The Bruno Walter Society has issued a long-playing re-recording of Fried's performance, but I find the transfer of the sound painful.

W. Parks Grant  
Oxford, Miss.

### Corrections

John Hurd of London Records points out that, in HiFi-Croistic No. 12 (May), Input Word C refers incorrectly to "the RCA Kismet recording with Robert Merrill, Regina Resnik, and Mantovani." Make that "the London Kismet recording."

Seymour Solomon of Vanguard Recording Society notes that Vanguard's recording of Handel's *Judas Maccabaeus*, one of the ten recommendations in "Using Records to Judge Loudspeakers" (June), is conducted by Johannes Somary—not Stephen Simon, as erroneously credited.

Peters International calls our attention to an incorrect record number in our April review of the Goodall English-language *Rheingold* and *Siegfried*. The latter, listed as EMI SLS 873, is in fact SLS 875.

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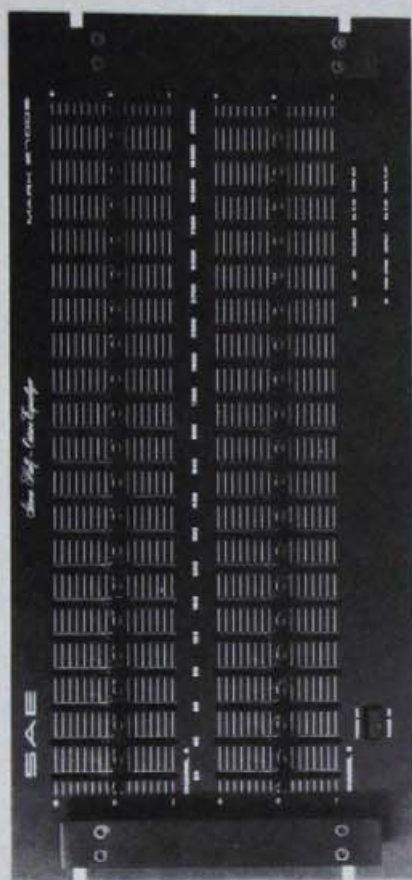
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CIRCLE 31 ON READER-SERVICE CARD

## Behind the Scenes

**Archiv in London.** In seventeen sessions crammed into just over a week, Gerd Ploebisch and his DG Archiv recording team have taped Handel's *Judas Maccabaeus* in London. As with the earlier *Israel in Egypt* and *Saul* recordings, Charles Mackerras conducts the English Chamber Orchestra, but it was likely the presence in the cast of Janet Baker (as the Israelite Man) that drew European editor Edward Greenfield to one of her five sessions. He found her taking a stand.

"I'm rather suspicious when you have to play tricks in order to sing it," she said, her brow furrowed. For half an hour, Greenfield reports, she had been coping with the most elaborate ornaments—devised by Mackerras—but at one point in her big aria "Tis liberty" she drew the line. It was not the notes she objected to, but the requirement to fit extra words in, and there singer and conductor promptly came to the most amicable of compromises. These two complete professionals returned to work, not wasting a moment, consistently producing for the microphones a sense of a live performance.

The other soloists are Felicity Palmer, Ryland Davies, John Shirley-Quirk, Christopher Keyte, and Paul Esswood, with the Wandsworth School Boys' Choir.

**Wagner update.** Progress (of various sorts) on three long-talked-about projects:

- DG's *Meistersinger*. Smooth sailing here. Concurrently with performances at the Deutsche Oper Berlin, the recording was accomplished in eleven four-hour sessions in West Berlin's Jesus Christuskirche. Eugen Jochum conducted the same forces he had at the live performances, with the cast headed by Dietrich Fischer-Dieskau (Sachs), Catarina Ligendza (Eva), Plácido Domingo (Walther), Christa Ludwig (Magdalena), Horst Laubenthal (David), Peter Lager (Pogner), and Roland Hermann (Beckmesser).

- EMI's *Lohengrin*. The winter's other Berlin Wagner recording project is a less happy story, with work already stopped twice. The original Philharmonic Hall sessions, scheduled for December and January (on the basis of which Angel optimistically penciled in a May release date—"Behind

the Scenes," March), came to a halt when Herbert von Karajan's recurrent back trouble required surgery. When recording resumed in February, Karajan suspended the sessions again after disagreements with the Lohengrin, René Kollo. There were rumors that EMI would have to give up the whole project, but Karajan, in consultation with EMI's Peter Andry, started devising ways of continuing with another tenor—younger and less famous but more in line with his thinking. As of now the rest of the cast—Tomowa-Sintow, Schröder-Feinen, Nimsgern, Ridderbusch—remains; further developments as they reach us.

- Decca/London's *Dutchman*. It has been known for some time that Sir Georg Solti would realize his keen desire to record an opera with the Chicago Symphony; it finally happened in March. After flying his concert *Dutchman* to New York for a Carnegie Hall gala, Solti brought the show back to Chicago for taping. The title role was sung by Norman Bailey, who was seen nationally in the part on public television here in May. The rest of the cast: Janis Martin (Senta), René Kollo (Erik), Martti Talvela (Daland), Isola Jones (Mary), and Werner Krenn (Steersman).

**Duchesse Régine.** Régine Crespin is scheduled to sing the title role in Offenbach's *La Grande Duchesse de Gérolstein* for CBS. The recording will be made in Toulouse with the forces of the Théâtre du Capitole under the company's music director, Michel Plasson.

**Stoky's 100th?** Not long after celebrating his ninety-fourth birthday, Leopold Stokowski signed a six-year contract with CBS. CBS's Paul Myers explained that plans are being made to record the maestro's hundredth-birthday concert. First sessions were to be devoted to *Aurora's Wedding*, the group of excerpts from Tchaikovsky's *Sleeping Beauty* based on most of Act III.

**Preiser arrivals.** German News Company, U.S. distributor of the Austrian Preiser label, informs us of a batch of new releases coming in both the *Lebendige Vergangenheit* and *Court Opera Classics* series. A number of singers already represented in the series are heard again: Emmi Leisner, Michael Bohnen, Koloman von Pataky, Franz Völker, Margarete Klose, Ria Ginster, Gerhard Hüsch (three new discs, two of which include his complete *Winterreise* and *Schöne Müllerin*), Titta Ruffo, Mattia Battistini, Frieda Hempel, and Paul Knüpfer. Among the singers getting their first



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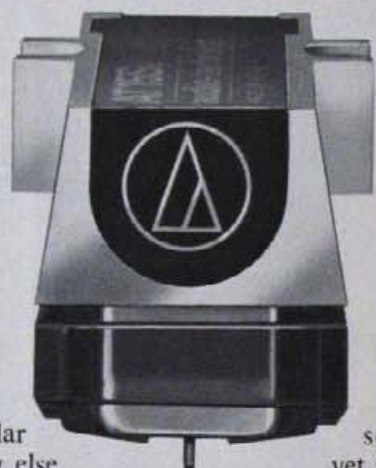


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solo discs in these series are Eide Norena, Maria Olszewska, Kerstin Thorborg, Ester Mazzoleni, Mario Sammarco, Jacques Urlus, Leonid Sobinoff, and Karl Jörn.

**Met broadcasts.** For the second consecutive year, the Metropolitan Opera is offering a disc edition of one of its "historic broadcasts" to all contributors of \$100 or more. The new issue is the *Tristan und Isolde* of February 8, 1941, with Kirsten Flagstad, Lauritz Melchior, Kerstin Thorborg, Julius Huehn, and Alexander Kipnis, conducted by Erich Leinsdorf. Copies of last year's set may still be available: the *Madama Butterfly* of January 19, 1946, with Licia Albanese, James Melton, and John Brownlee, conducted by Pietro Cimara. Write to the Metropolitan Opera Guild, 1865 Broadway, New York, N.Y. 10023.

**Steber Foundation.** Three discs containing material recorded at recitals given by Eleanor Steber in 1974 and 1975, available only as a group, have been issued by the Eleanor Steber Music Foundation. The repertory includes operatic excerpts, various songs, and the complete *Geistliche Lieder* from Wolf's *Spanish Songbook*. The Foundation will use money raised to assist singers attempting to establish their professional careers. The records cost \$18.95, from the Eleanor Steber Music Foundation, 2109 Broadway, New York, N.Y. 10023.

**Classical radio.** We all agree that there should be more classical programming on radio, but how does one find out who is programming classical music in the U.S.? Earlier this year the first edition of a booklet called *Musica* appeared, listing more than 500 stations (AM and FM), arranged geographically, with the hours of their classical broadcasting. The response was so enthusiastic that a second edition is already available, listing more than 750 stations. The price is \$3.00 postpaid, from *Musica*, Box 1266(y), Edison, N.J. 08817.

**Heifetz discography.** John Anthony Maltese writes to inform us that his complete discography of Jascha Heifetz—"a comprehensive listing of LPs, 45s, 78s, and tapes (reel-to-reel, four- and eight-track cartridges, and cassettes) released in the United States and Great Britain"—has been published in *Le Grand Baton*, the journal of the Sir Thomas Beecham Society.

The issue is available to nonmembers for \$4.00 including postage from the Sir Thomas Beecham Society, Editor, *Le Grand Baton*, Box 6361, Cleveland, Ohio 44101.



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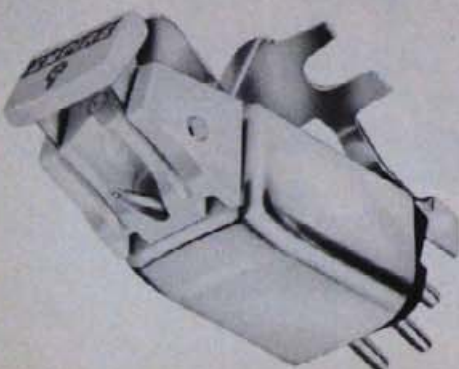
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Percy Faith (1909-1976)



## Percy Faith— Master of More than Mood Music

by Gene Lees

AS IS WIDELY KNOWN, the CBS Records Group has made a reciprocal agreement with the Russian Melodiya label. This has given CBS access to a large and important catalogue of Russian classical recordings. What did the Russians get out of the deal?

The answer is surprising. At the top of the list of recordings they wanted were the albums of Percy Faith.

Percy Faith? Yes—he of "mood music" with the pretty string sections.

Whether the Russians know or even care is hard to say—few Americans realize it—but Percy Faith, who died of cancer at the age of sixty-seven this March, holds a significant place in American popular music. He was one of the first arrangers to bring to the performance of popular music the skills, scope, and instrumentation of classical music. And he was doing it as far back as the mid-1930s.

In an association with Columbia Records that lasted nearly thirty years, Faith recorded more than sixty-five albums—even he wasn't sure of the precise number. "None," he said, "ever went into the red, despite the large orchestras I used." He also wrote scores for eleven motion pictures.

If your memory, or record collection, encompasses the early 1940s, you know that the songs of the period were superior to their orchestrations. The writing, particularly accompaniment for vocals, was often awkward and unevolved, with bad instrumental balances and clumsy voice-leading. And the string writing, on those rare occasions when it was heard, was especially unimaginative. The good writing was found in jazz orchestration, but this was limited to trumpet, trombone, saxophone, and rhythm sections. When Artie Shaw, Tommy Dorsey, and Harry James added strings to their bands, the effect was unsatisfactory, partly because they could not afford to carry on the

road the number of strings needed to balance the brass.

One of the most pervasive influences on pop orchestration, and not only in the U.S., has been Robert Farnon. Virtually every professional arranger—from André Previn and Quincy Jones to J. J. Johnson and Roger Kellaway—has been influenced directly or indirectly by him. But what many of his followers don't know is that Farnon himself was greatly influenced by Percy Faith. He had been one of Faith's trumpet players when the two Toronto-born musicians were with Canada's government-owned network, the CBC. "I learned a lot from Percy," Farnon has told me. "I admired him very much. I admired his taste. He especially taught me what to leave out."

Faith studied at the Toronto Conservatory under a strict disciplinary system. "I was ready," he told me, "to jump two or three years ahead of what I was doing. But I was told by my harmony teacher, 'You must learn the basics. You must learn Bach, all the preludes and fugues, on the piano, then orchestrate them for string quartet, for brass quartet; learn Beethoven. Learn that foundation, and then when it's become a part of you, forget it and go on.'"

In 1934, Canada established the CBC. Percy went to work there almost as soon as it was organized and began writing and conducting the music for a series of shows called *Music by Faith*. From the beginning he used strings and "classical" woodwinds, as opposed to the customary saxophones.

"The strings were always quite busy in anything I wrote," Percy said. "But the trumpets would have many, many bars' rest, and I gather that Bobby [Farnon] did a lot of listening."

"I had added six girls to the orchestra. I wanted certain sounds. The



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The 1140 has built-in bias with the bias controls up front so you don't have to tear the electronics apart every time you change tapes. Plus a 200 kHz bias frequency for further noise reduction and one of the few heads around capable of erasing those exotic new formulations.

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spill tape handling, peak level indicators and an optional floor-standing console that makes the 1140 even easier to work with.

For all that and more the 1140 costs \$1199.95, about 45¢ more than Teac's A3340S. But if you spend that extra half-a-buck with us, you can spend more time with your music.

## DOKORDER



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	TEAC A3340S	DOKORDER 1140
Wow and Flutter 15 ips	0.04%	0.04%
Frequency Response at 15 ips	±3 dB, 35-22K	±3 dB, 30-23K
Signal-to-Noise Ratio	65 dB WTD	60 dB WTB
Front Panel Bias Controls	No	Yes
Built-in Test Generator	No	Yes
Mic/Line Mixing	Yes	No
Peak Indicator Lamps	No	Yes
Motion Sensor	No	Yes
Manufacturer's suggested retail price	\$1199.50	\$1199.95

Features and specifications as published by respective manufacturers in currently available literature.

CIRCLE 8 ON READER-SERVICE CARD



What you don't know  
about effective tip mass  
won't hurt you,  
just your records.



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what you don't know  
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on your records  
you've probably  
never heard  
before, because of compression and other compromises made by the  
record manufacturer (for reasons we explain in our literature).

The dbx 117 expands the listening experience to restore the gritty  
steel of guitar, the incisive bite of brasses and the percussive impact of  
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**dbx**

dbx, Incorporated  
296 Newton Street  
Waltham, Massachusetts 02154

CIRCLE 9 ON READER-SERVICE CARD



budget wouldn't allow for extra per-  
cussion and extra woodwinds, and I  
found I could get six girls for \$5.00  
each per show. They did nothing but  
vocalise at first, in conjunction with  
three or four flutes plus a vibraphone  
and a celesta. We got a great sound.  
People thought it was an organ or  
some kind of electronic instrument.

"Once this clicked, the CBC sug-  
gested, 'Since you've got them, why  
don't we hear something with lyrics?'  
So I turned the girls over to Bobby,  
and I said, 'Let's do one number a  
week.' But since we were so avant-  
garde, I said, 'I don't want any ballads.  
Let's do nothing but out-of-left-field  
tunes like "Where, Oh, Where Has My  
Little Dog Gone?" but do them in a  
jazz idiom.' So Bobby started writing  
these vocal arrangements for me, and  
they were fantastic. With the band  
and six girls, it really swung."

In 1940, a CBC executive ordered  
the *Music by Faith* budget cut, even  
though it was one of the few CBC pro-  
ductions to be carried regularly to the  
larger audience of an American net-  
work. Faith was angered by these  
economies.

NBC was at the time auditioning  
conductors to replace Joe Pasternak,  
conductor of the *Carnation Contented  
Hour*, who had died. Faith, now  
thirty-one, went to Chicago to audi-  
tion in July of that year, was hired for  
the summer, and in September be-  
came permanent music director of the  
program. But his pioneer work had al-  
ready been done in Toronto. "As a  
matter of fact," he said, "as late as  
1955 I recorded some arrangements  
that were, practically note for note,  
arrangements I did in Toronto in the  
Thirties."

A little over two years ago, we  
talked in the Hollywood office of his  
son Peter, a composers' agent (who  
died a few months later at the age of  
thirty-seven). "Jerry Goldsmith said  
that the art of film scoring is gone—  
scoring in the style of Max Steiner, Al-  
fred Newman, or his own," Percy told  
me. "And he's right. It's an electronic  
world now, and I've been studying the  
Moog, the Arp, the Fender-Rhodes pi-  
ano. I use them in my recordings  
sometimes."

"But you walk into the recording  
studio, the sound stage, and you don't  
see any big string sections, any ninety-  
piece orchestras for the main titles.  
You'll see three or four keyboard men,  
the finest in the country, all sitting  
around with synthesizers and electric  
pianos and the E-3 Yamaha organ,  
which can practically simulate any  
orchestra sound, and that's your  
score."

"With thirty-two-track equipment,



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CIRCLE 18 ON READER-SERVICE CARD

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one man or a group of four or five men can come up with some fabulous sounds. And so you're into a new study. It is a pity, but that's the way it is today, and you either go along with it or be dropped."

Faith was, in fact, quite flexible and adapted to the changes in music with surprising facility. For one thing, he understood rhythm sections. Unlike some composers and arrangers, he had the knack of picking the right musicians to play his music. The emphasis in his writing was often on strings and woodwinds, but he wrote extremely well for brass; he knew how to make it swing.

"I do three albums a year," he said. "There is a rock influence in the things I've done in the last few years. I've just had to. You cannot sell Gershwin, you cannot sell Rodgers—they've had it. ... The Establishment won't buy it, and the young people aren't interested, so you've got to give it to them their way."

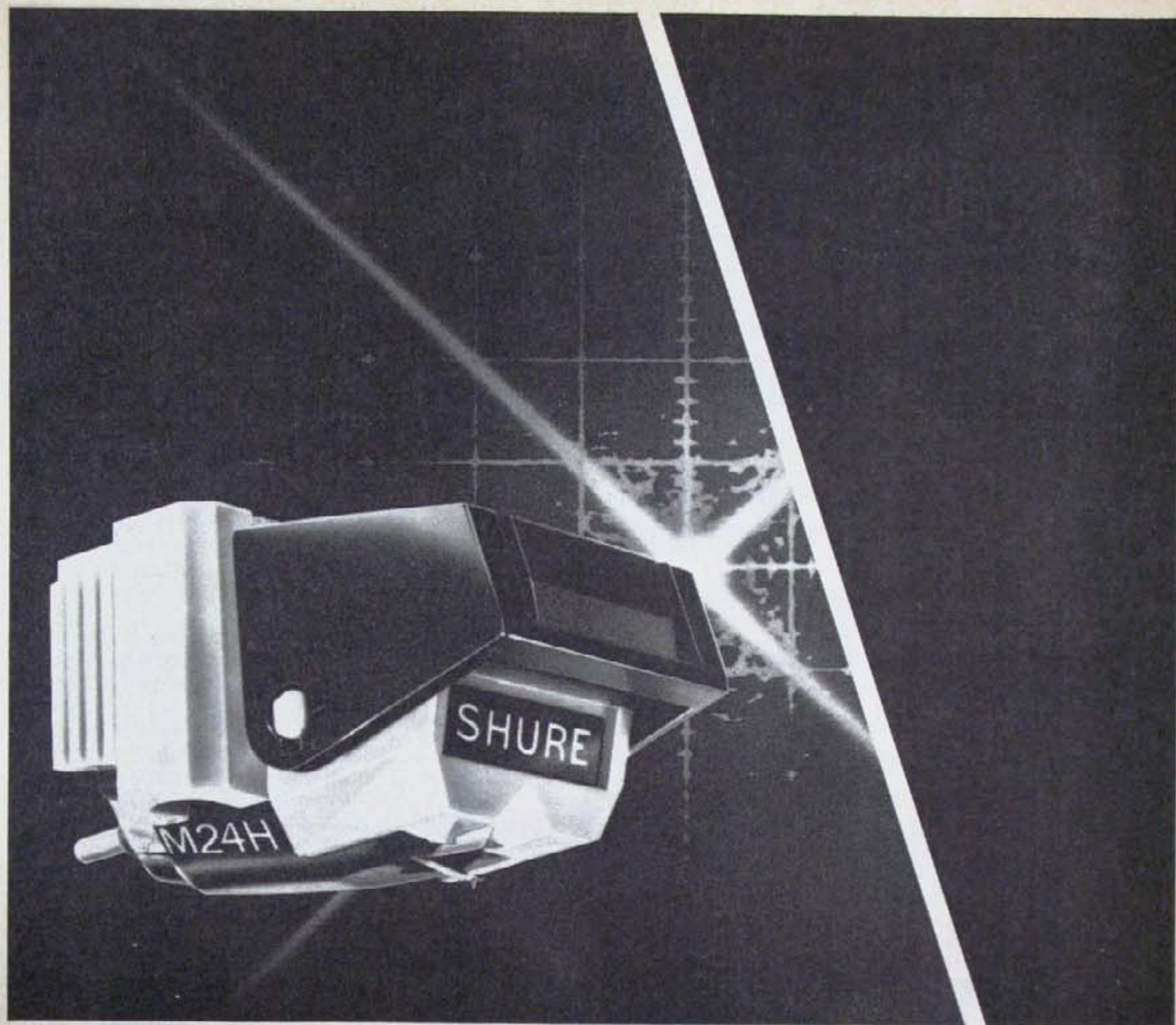
What had gone wrong with film scoring? Percy's answer was in accord with the analysis of most important film composers. Under the old structure of the film industry, in the time of the dominance of the major studios, there was a key figure in the musical equation: the music director. Himself a musician, he functioned as intermediary, arbitrator, and translator between the composer and the producer and/or director. In the present phase, this figure has vanished, and now the composer is forced to deal directly with producers and directors, who often have little or no understanding of the dramatic function of music.

"That's what's going on now," Percy said. "And so I haven't done a film score in three years. I'd just as soon do my recordings, do a few concerts, play some golf and fish, rather than get involved with directors and producers who really don't know anything about music and will admit it to you but will stand over your shoulder while you're writing. That's a terrible amount of pressure to be under."

"My son Peter is ... involved with a film right now where they've done three scores, by three very well-known writers. One of them was Dave Grusin, who is a great, great talent. Dave was brought in after they threw out the first score."

"The producer was practically standing over his shoulder all the time, wanting Dave to play the score on the piano as he was writing it. So at the recording session, on the scoring stage, when they were in rehearsal, Dave called the producer out to stand beside him, in front of the orchestra, and said, 'I want you to listen to this."






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The new Shure M24H Cartridge offers audiophiles the best of both worlds: It is the only cartridge on the market that does not compromise stereo reproduction to add discrete quadriphonic capability. It eliminates the need to change cartridges every time you change record formats! This remarkable performance is achieved at only 1 to 1½ grams tracking force—comparable to that of some of the most expensive conventional stereo cartridges. Other M24H features include the lowest effective stylus mass (0.39 mg) in quadrphony, a hyperbolic stylus tip design, an exclusive "Dyneric® X" exotic high-energy magnetic assembly, and a rising frequency response in the supersonic carrier band frequencies that is optimized for both stereo and quadriphonic re-creation. If you are considering adding CD-4 capability, but intend to continue playing your stereo library, this is the ONE cartridge for you.

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BY CAPITOL

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CIRCLE 5 ON READER-SERVICE CARD

because I wouldn't want to waste any time."

"Dave played four bars and stopped and turned to the producer and asked, 'What do you think of it so far?' This is in front of the orchestra! So the producer is a little stunned, because he isn't in an office with Dave, where he could clobber him, he's in front of thirty or forty men. He asked, 'Well, isn't there more?' and Dave said, 'Sure.'"

"So Dave said, 'Okay, boys, bar 5.' And then he went on and played bars 5, 6, 7, and 8, and stopped again, and said, 'What do you think of it so far?' And the producer turned around and walked out, figuring that he was being had."

"Dave finished the score, and then they threw that one out, and now they're working on a third score."

"I'd hate to depend on that form of composition for my bread and butter."

Therein lies the real misfortune of Faith's career. Not adept at the machinations of Hollywood—he was perhaps too testy and blunt for the politics of that Byzantine place—he was never given the film assignments he deserved and thus has not received his due as a composer. But there are clues to how good he was, one of them being his score for *The Oscar*. That turgid melodrama, one of the worst turkeys ever produced on a large budget, is memorable only for its music. The score is full of song—joyous, witty, sardonic, and delicately tender by turns—all of it beautifully orchestrated, as one would have expected. One of the ballads, given lyrics and titled "Maybe September," has an unusual and even startling construction. It reaches its end and then totally unexpectedly continues into an exquisite coda, an entirely new melody. "I just felt the need for it there," Percy said matter-of-factly.

Because of the paucity of his film scores, Faith will always be known as an arranger. But his arrangements are models of taste and clarity from which any music student could and should learn. Perhaps all that Bach work in his own student days had its effect, but whatever the cause, you can always hear the lines—all of them, all the way to the bottom of his orchestrations. The writing was always fresh, and he had a wonderful command of colors.

His albums continue to sell, although most of the recent "pop" material he had to work with ran shallow in terms of linear and harmonic content. Still, if ever a man knew how to make a silk purse of a sow's ear, Percy Faith did.



# SOME OF THE HEAVIEST EQUIPMENT IN THE BUSINESS.

The next time you're looking at tape decks, pick up any piece of Akai equipment. They're heavy.

The motor, the drive system, the flywheel. Akai makes them big. As big and as strong as we possibly can. So they'll perform for you.

The Akai GX-630DSS is a good example. Pound for pound and dollar for dollar, it's one of our heaviest. It's driven by a big, heavy-duty AC servo capstan motor plus 2 eddy current motors for fast forward and rewind. It features Akai's Quadra-Sync® for

multiple track synchronization when recording. It offers complete versatility for mixing. And pitch control. It's got just about everything. For the guy who wants to do just about everything.

Our GX-650D stereo tape deck has just about everything, too. Closed loop dual capstan drive. One AC servo capstan motor plus 2 eddy current motors. Sound on sound. 3 speeds. It's got it.

That's the kind of equipment you can expect from Akai. Strong because we're heavy. Heavy because we're strong. Akai. Pick one up.



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**COMIN' ON STRONG!**

Akai reel-to-reel tape decks from \$299.95 to \$1,495.00 suggested retail value. Akai America Ltd. 2139 East Del Amo Blvd. Compton, California 90220.



# A Progress Report From Advent.

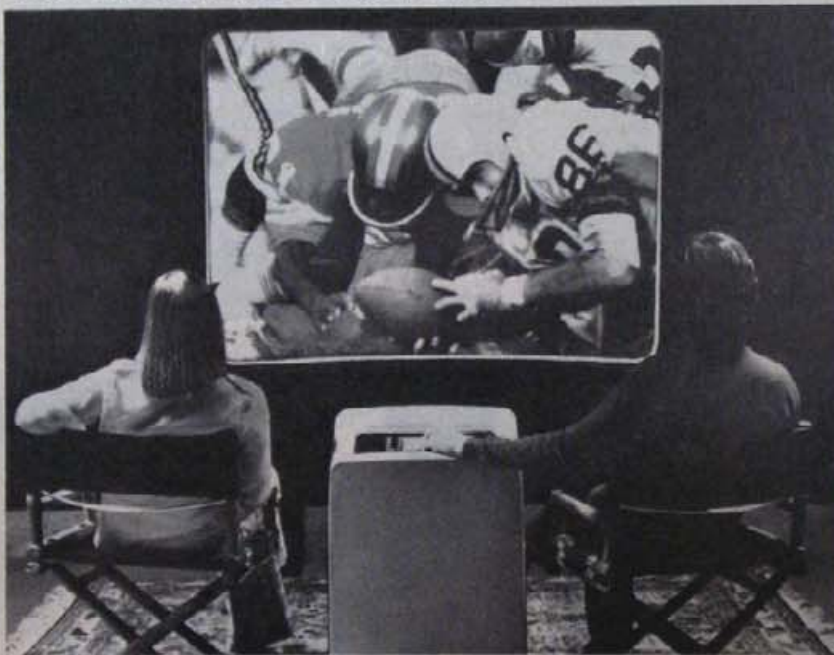
Since we don't do a tremendous amount of national advertising at Advent, we try to make most of our ads convey (as directly and clearly as we can manage) what our individual products have to offer and why you will find them worth seeing and hearing for yourself.

But every so often (this will be the third time), we think it makes sense to give a general picture of what we are doing and why.

We didn't go into business at Advent to produce a standard line of products in every price and performance category. The idea was, and is, to produce exceptional products one by one—products that would be usefully different in performance and value. These products come when they come, usually one or two a year.

## Advent Life-Size Television.

Our most unmistakably different product is the VideoBeam® projection television set, with a vividly clear and bright life-size color picture that measures *seven feet* diagonally. The picture is ten times larger than a standard 25-incher, and the difference it makes in the



television experience is total. It does for television—finally—what component equipment did for music.

Like everything we make, our television set didn't come about because of elaborate "market research" or imitation of what anyone else was doing. We did it because it was interesting and exciting to *us*, and because we trusted that what would interest us would probably do the same for a lot of other people. And we did it because the giant manufacturers of TV sets, as had been the case earlier with audio equipment, were showing no real signs of developing something dramatically better than the standard mass-market product.

The VideoBeam set shown is the 1000A, the one that has been bringing amazed rave notices from people and publications across the country. It costs \$4,000\*, and is worth every nickel to the people who can afford it.

There's no way to describe here what Advent life-size television has to offer. We will be happy to send you a brochure that does a better job of it, but the only way to get the real picture is to see the real picture.

*Video Beam® is a trademark of Advent Corporation. Dolby is a trademark of Dolby Laboratories.*

## The Advent Loudspeaker.

Our first major product was the Advent Loudspeaker. It became one of the best-selling speakers in the country before we ran an advertisement on it. And according to every major survey we've seen over the last three years, it has become the single best-selling speaker system around.

The idea behind it was that it was possible to develop for a very



moderate cost a speaker that would give up nothing significant in direct comparison to the most expensive models available or likely to be.

It may be difficult to believe that a relatively simple-looking speaker that costs \$149\* or less in this country (depending on cabinet finish and how far it's been shipped) is a speaker in the "best" category. But it is—and most of what it offers, including its overall frequency range and amazing bass response, is unapproached by many speakers at far higher cost.

Listening to it will tell you why it is at the top of the best-seller list.

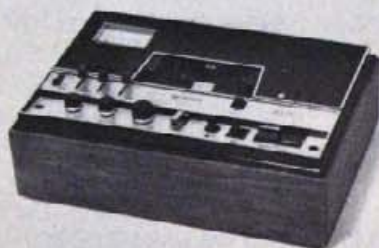
Because we follow opportunities when we see them, without worrying what will happen to an existing product, there is also the Smaller Advent Loudspeaker to listen to. It won't play quite as loudly as the original Advent, but



it offers the *same* frequency range and overall sound for quite a bit less money—and at about half the size. If you would like an absolute maximum of performance-per-dollar, it is worth hearing.

### The Advent 201—And Process CR/70 Cassette Recordings.

There are now hundreds (seemingly) of cassette decks employing the Dolby System and claiming high or highest performance. But the first high-performance cassette equipment came from us, as the result of a development effort that some audio manufacturers said was pointless at the time. And the Model 201 cassette deck (on the market for several years now) remains the simplest and most enjoyable way we know of to make a perfect recording of whatever you're after. We know of no tape machine of *any* kind of price that



makes it so easy—and easily repeatable time after time—to produce a superb recording, generally indistinguishable from the original source. It costs \$340.\*

We developed the Model 201 in great part to show the full potential of cassette recording. To take that a step further, we market recorded cassette releases—Process CR/70 Cassettes—that employ the Dolby System and chromium-dioxide themselves. We designed our own tape duplicators for the purpose, which operate at four times recording speed instead of the usual sixteen. And we use excellent original material, including some recordings we make on our own. The result is a series of cassette releases that have been called a new standard for the recording industry.

### The Advent FM Radio.

All of our audio equipment is based on the idea that the sim-

plest route to high performance is the best, and that gadgetry for its own sake is not our cup of tea. The product that takes that furthest in many ways is the Advent FM Radio (The Model 400), which is a simple and very small two-piece *mono* FM radio with outrageously good sound and reception that compares (as test labs have confirmed) with that of complex receivers of many times the cost. If there is a situation where you live, work, or go to school where a big component



audio system would be too elaborate and/or expensive, but where you want superb music, the Advent FM Radio is probably the perfect answer. It costs \$125.\*

### The Advent Receiver (The Model 300).

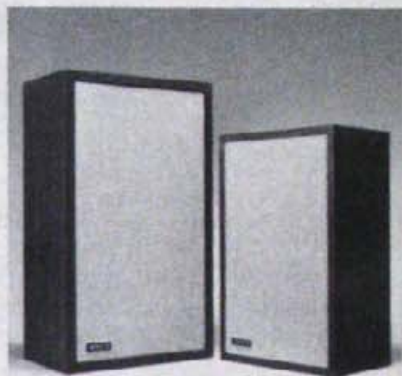
This is our newest, and as different as it looks. (It will be coming on the market at about the time this ad appears, but won't be everywhere until later in the fall). All this piece of equipment has to offer is sound quality that compares, within its power capabilities, to that of the most expensive separate preamps, tuners, and amplifiers available. It has a new phono preamp circuit (the Holman Circuit) that sets new standards of effective performance



under actual listening conditions. Its tuner is also comparable with the very best in effective performance. And its amplifier provides a minimum of 15 watts per channel (into 8 ohms, 40-20,000 Hz, with less than 0.5% harmonic distortion). It is more than powerful enough to drive most speakers (including all Advents) under home conditions. It costs \$260\*—less than many of the separate tuners and preamps it sounds as good as.

### The Advent/2 and Advent/3.

We keep finding ways, through straightforward design and improved manufacturing techniques, to produce good speakers for less and less money. The Advent/2 (in the well-under-\$100 price range)



and the Advent/3 (in the \$50 range) are the latest examples. They don't have the final half-octave of lowest bass response that the Original Advent and Smaller Advent have, but they offer near-identical overall sound, with superb clarity and definition, and with an octave-to-octave tonal balance that does justice to the many different kinds of music and ways of recording it. If you have a limited budget but high expectations, you can't go wrong listening to them.

That's all the room we have. If you would like more information on any of the products we've mentioned, please send the coupon.

Thank you.

Advent Corporation  
195 Albany Street  
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I'd like to know about:

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The Advent Loudspeaker shown is finished in genuine walnut veneer. Our other speakers have walnut-grain vinyl finish.



# THE TAPE THAT'S TOO GOOD FOR MOST EQUIPMENT.

Maxell tapes are not cheap.

In fact, a single reel of our most expensive tape costs more than many inexpensive tape recorders.

Our tape is expensive because it's designed specifically to get the most out of good high fidelity components. And unfortunately, there's not much to get out of most inexpensive tape recorders.

So it makes no sense to invest in Maxell unless you have equipment that can put it to good use.

And since even a little speck of dust can put a dropout in tape, no one gets into our manufacturing area until he's been washed, dressed in a special dust-free uniform and vacuumed.

(Yes, vacuumed.)

Unlike most tape-makers, we don't test our tape every now and then. We test every inch of every Maxell tape.

Which is why every Maxell tape you buy sounds exactly the same. From end to end. Tape to tape. Year to year. Wherever you buy it.

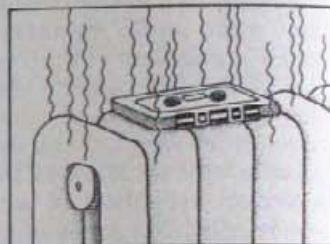
And Delrin rollers. Because nothing sticks to them.

A lot of companies weld their cassettes together. We use screws. Screws are more expensive. But they also make for a stronger cassette.

**Our tape comes with a better guarantee than your tape recorder.**

Nothing is guaranteed to last forever. Nothing we know of, except our tape.

So our guarantee is simplicity itself: anytime you ever have a prob-



Our guarantee even covers acts of negligence.

**Give our tape a fair hearing.**

You can hear just how good Maxell tape sounds at your nearby audio dealer.

(Chances are, it's what he uses to demonstrate his best tape decks.)

**No other tape sounds as good as ours because no other tape is made as carefully as ours.**

For example, every batch of magnetic oxide we use gets run through an electron microscope before we use it. This reveals the exact size and proportions of individual particles of oxide. Because if they're not perfect, the tape won't sound perfect.



Every employee, vacuumed.

**No other tape starts off by cleaning off your tape recorder.**

**We clean off the crud other tapes leave behind.**

After all the work we put into our tape, we're not about to let it go to waste on a dirty tape recorder head. So we put non-abrasive head cleaning leader on all our cassettes and reel-to-reel tapes. Which is something no other tape company bothers to do.

**Our cassettes are put together as carefully as our tape.**

Other companies are willing to use wax paper and plastic rollers in their cassettes. We're not. We use carbon-impregnated material.

lem with any Maxell cassette, 8-track or reel-to-reel tape, you can send it back and get a new one.

You may be surprised to hear how much more music good equipment can produce when it's equipped with good tape.



Maxell Corporation of America, 130 West Commercial Ave., Mahanachie, New Jersey 07074  
CIRCLE 19 ON READER-SERVICE CARD



## Update on Ambience

The simulation of concert-hall acoustics seems to be occupying a good deal of the attention of the engineering talent in the high fidelity industry just now. Earlier ("News and Views," March) we reported on an ambience-generation device developed by Audio Pulse based on digital technology. (By the time you read this, we understand, the unit will have reached dealers.)

Applying digital technology in the grand manner, Acoustic Research has come up with a sixteen-channel time-delay system designed to simulate the acoustics of large concert halls. The system, which was demonstrated at the Audio Engineering Society convention May 4-7, is operated under the control of a special-purpose computer that sets the operating parameters according to a mathematical model of the hall to be simulated.

David McIntosh and Robert Berkovitz, designers of the unit, say there are three audible properties of concert-hall acoustics: Reflections make a sound source more diffuse and seemingly larger than it is and add a sense of space; high frequencies become incoherent and make localization of the source more difficult than otherwise; and the sound decays gradually after the source has ceased. The last effect can be easily recorded or simulated and recorded, but the first two depend on the specific timing of the reflections in the particular hall and are harder to imitate. AR reports that listeners to whom the delay system has been demonstrated have found it very convincing, particularly when room lights are extinguished to eliminate visual clues.

The system is at present experimental, with applications in architectural acoustics, psychoacoustics, and other studies—uses for which AR is contemplating making it available. It is also expected that a simpler mechanism for home use will be developed in the future.

## Meanwhile . . .

In the realm of products that one can go out and buy, Sound Concepts—like AR, a Boston-area manufacturer—has announced its Model SD-50, which is yet another time-delay system designed for ambience simulation. It uses no digital-processing techniques and is based on bucket-brigade devices (see "News and Views," June). The SD-50 uses a single delay that is adjustable to anything between 5 and 50 milliseconds in stereo or double that in mono. The optimum delay, we have been informed, is one that matches with the reverberation already recorded in the selection. Also adjustable are the amount of signal recirculated for additional "bounces" and the rate at which high frequencies are rolled off with each pass through the delay.

The SD-50 is most convincing when the synthetic ambience is reproduced through an auxiliary set of loudspeakers, but provision is made for routing ambience to the main speakers along with the primary program material. This feature also allows the unit to be used for enhanced headphone listening. (The device sells for \$600—only slightly higher than the present price of the Audio Pulse simulator.)

CIRCLE 160 ON READER-SERVICE CARD

## Undoctored Binaural Discs

Ironically, in view of last month's "News and Views" item on compression, two discs recorded without any signal processing at all (other than the usual RIAA pre-emphasis) have come to our attention. These—"Zgodava Plays [piano] Recital Favorites" and "Musica Antiqua Entertains"—were recorded and produced by Russell Borud, a recording engineer well known in the Twin Cities.

Borud, who gives careful instructions for setting realistic levels on the Zgodava disc, believes that music is often played back too loudly. He also cautions against sacrificing realism to excessive bass boost.

The recordings themselves are designed for binaural (headphone) listening, and when they are heard that way the effect is uncannily realistic. A reasonable degree of stereo compatibility is retained, but, if you must listen to these discs via loudspeakers, synthesized quad is the way to go. The sound produced in this way, while not strictly

"accurate" in the purist's sense, is very nearly as convincing as the binaural sound.

The program material, incidentally, is excellent on both albums: Richard Zgodava plays works by Ginastera, Gottschalk, Debussy, Liszt, and Moszkowski; the *Musica Antiqua* contains works of Machaut, Isaac, Josquin, and other early composers. The discs are available from Sound Environment, 100 N. Sixth St., Minneapolis, Minn. 55403 for \$7.00 each.

## Universal Matrix Decoder Uses Only Two Channels

Having heard how well binaural discs "decode" for synthetic quad reproduction, we decided out of curiosity to try a matrix four-channel disc on two-channel headphones. Astonishingly, we liked what we heard. It is not quite the same as listening to a real binaural disc, but it is awfully



good and a major improvement over normal stereo via phones.

But even more astonishing was a note we received from Benjamin Bauer of the CBS Technology Center (who developed the SQ system) a few days later, suggesting that an SQ disc heard binaurally would be fairly accurately decoded. Considering the source, the suggestion piqued our interest, so we investigated the matter more closely. And it does work! Even a surround-type disc was reproduced with the instruments in about the same positions as when decoded in a more orthodox fashion and routed via loudspeakers. Again, not perfect, but very good—and without any logic.

A paper by Koshigoe and Takahashi of Sansui—QS discs decode very nicely this way, too—establishes that at frequencies up to about 1 kHz phase differences at the listener's ears give the primary clues for sound localization. The paper, which was delivered at the Los Angeles Audio Engineering Society convention in May, goes on to suggest that the phase shifting used in QS encoding helps to provide such clues, other matrices succeeding to a lesser extent. But whatever the explanation, the phenomenon surely seems a boon for headphone freaks who may have despaired at the lack of suitably recorded material.

## And By the Way . . .

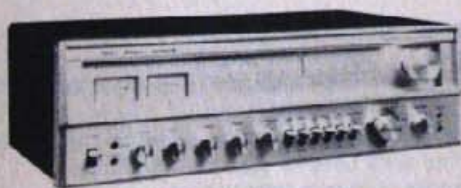
- Angel Records has upgraded its recorded cassettes, adding Dolby noise reduction and improved processing developed by Capitol that increases available dynamic range significantly. The new XDR series—for Expanded Dynamic Range—promises up to 4 dB higher sound level, high frequencies out to 15 Hz, and a sizable decrease in electrically induced distortion. The initial release will consist of eleven new performances and a demonstration tape.

- TDK Electronics Company has been granted a patent, which lists Takateru Satou as the inventor, for a cassette tape windup control that prevents runoff and jamming, especially when the tape is switched from fast winding to a play mode. The new development, using a series of tension arms and a spring, is incorporated in TDK's C-180 cassette, available in the D series only.

- Sony Corporation has found a way to prevent illegal copying of recorded software issued via Betamax video-cassettes. Prints produced with the new system will play back just like any Betamax cassette but will produce an abnormal image if copied.

## Equipment in the News

### New receiver from Fisher



One of the new receivers in Fisher Corporation's line is the RS-1050. Its FM section has ladder-type filters in the IF section for high selectivity and freedom from distortion. Other features include tape monitoring and dubbing with two decks, a selector switch for three speaker pairs, an output that can be used for either headphone listening or recording on a third tape deck, and a stepped volume control calibrated in dB. Power is rated at 60 watts (17.8 dBW) from 20 Hz to 20 kHz with 0.15% distortion, mono FM sensitivity at 1.8 microvolts (10.3 dBf). The cost of the RS-1050 is \$499.95.

CIRCLE 155 ON READER-SERVICE CARD

### Pioneer's newest Dolby deck

The Pioneer CT-F8282 is a front-loading two-motor Dolby cassette deck with a twin-link design that holds it firmly in a vertical position. The solenoid-operated transport controls allow mode changes without going through the STOP control. The deck also has switching for "memory stop" and for ferrichrome, chrome, and "standard" tapes. Frequency response is rated at 30 Hz to 15 kHz  $\pm 3$  dB with chrome tape, signal-to-noise ratio (without Dolby) at more than 53 dB, and harmonic distortion at no more than 1.5%. The cost of the CT-F8282 is approximately \$400.

CIRCLE 156 ON READER-SERVICE CARD

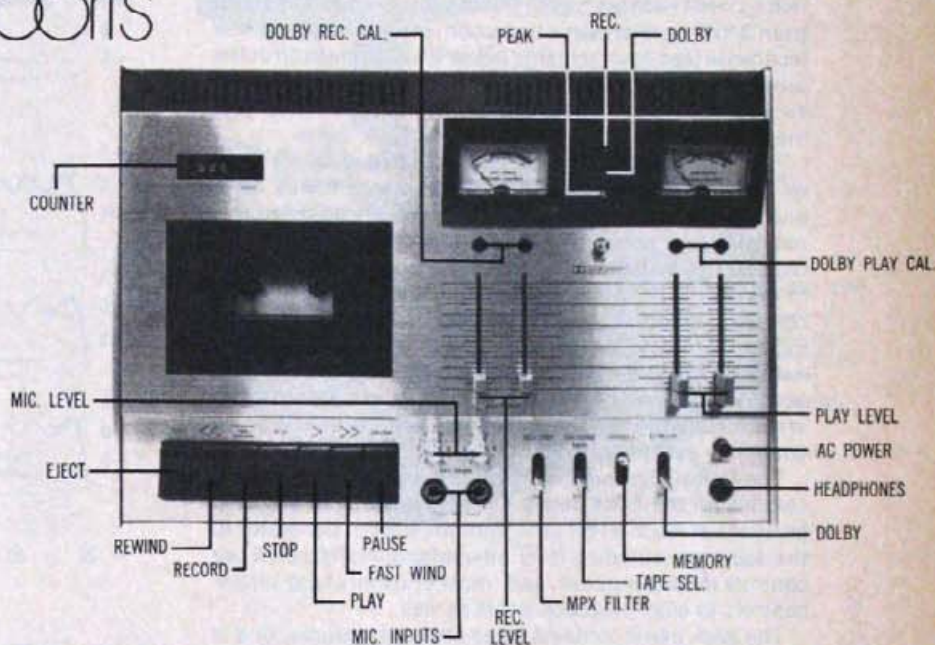




# A CONSUMER'S GUIDE

## New Equipment Reports

### The Elegant Harman-Kardon HK-2000



**The Equipment:** Harman-Kardon HK-2000, a top-loading Dolby cassette deck, in brushed-metal case. Dimensions: 15 by 10½ by 4¾ inches; clearance for interconnect cables required at back. Price: \$399.95. Warranty: "limited," one year parts and labor. Manufacturer: Harman-Kardon, 55 Ames Court, Plainview, N.Y. 11803.

**Comment:** It is gratifying when the appearance of a piece of equipment informs the user unequivocally what it is meant to do and how it operates. This is not an easy thing to accomplish for a component of more than minimal complexity, and in a cassette deck—with which one might be recording live—the speed with which a desired response can be achieved may be of the essence. The HK-2000 combines this type of truly functional design with both attractive cosmetics and solid performance.

The transport controls are of a modified "piano-key" type with gentle spring loading for PAUSE, STOP, and EJECT, and stiffer loading for the other functions. This furthers the functionality of the design while providing an unusually attractive "feel" to the controls. Their arrangement and interaction insure that no erroneous combinations will produce disastrous results. Pressing RECORD after PLAY has been engaged brings the transport to a halt. Pressing RECORD alone allows presetting of levels without engaging the transport. Recording is initiated by pressing PLAY while RECORD is held down. Access to the heads for cleaning and degaussing is very convenient, involving only the removal of a plastic strip at the front edge of the cassette well.

The pause requires an audibly long fraction of a second to come up to speed, so that some "wow-ing in" can be discerned if you attempt to use it (for example, in tape dubbing) to edit music in midnote. Though the pauses on some other decks are faster acting, this can hardly be con-

sidered a serious fault in the HK-2000, since this kind of editing is seldom if ever required in normal cassette-deck use and more normal applications of the pause are well executed.

The toggle switches that control the electronics make it delightfully plain which functions are engaged and which are not. The most problematic feature of the controls is that the knobs on the sliding potentiometers that set recording and playback levels are just a bit too far apart to allow easy adjustment of both channels with a single finger. Add to this the fact that these pots do not track quite perfectly (though no less so than we have become used to with this type of control) and have different amounts of mechanical resistance as they are moved along, and it becomes clear that fades are not the easiest stunts to pull off. But with care they can be managed.

The meters are of the peak-reading type, supplemented by a peak light meant to catch transients too short to overcome the inertia of the meters' pointers. The meters are calibrated so that their 0-VU indication measures 3 dB below the DIN standard's 0 VU in the lab's tests.

Lab data were taken with two tapes suggested by Harman-Kardon: Maxell UDXL ferric for the LOW NOISE position of the tape switch and Memorex CrO<sub>2</sub> for the CHROME posi-

**REPORT POLICY** Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation's leading research organizations. The choice of equipment to be tested rests with the editors of *High Fidelity*. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested. Neither *High Fidelity* nor CBS Technology Center assumes responsibility for product performance or quality.



tion. In addition, we tried the deck with such tapes as TDK SA (using CHROME) and Audua (using LOW-NOISE) with excellent results.

The record/playback response curves are up to what we have come to expect in this price range—except response in the deep bass is exceptional. With ferric tape the high end remains within 3 dB of flat up to 14 kHz; with chrome tape it is within 2 dB to 14 kHz. Noise, measured with the CBS weighting curve, is 50½ dB below DIN 0 VU, and the Dolby circuit reduces this by about the expected 9 to 10 dB from 3 kHz up. Harmonic distortion, measured by the new technique (see box), remains below 1%. Comparison of the unweighted data with past reports will show that this is an exceptionally quiet cassette deck. Worst-case flutter is a mere 0.06%.

The mike inputs of the HK-2000 are paired phone jacks on the top panel and accept low-impedance mikes. Mike and line inputs can be mixed. Mike levels are adjusted at a pair of rotary pots (making simultaneous fades in both channels essentially a two-hand operation), and the level of the sum of the mike and line inputs is controlled by the recording sliders. Thus a fade from pure line input to pure mike input cannot be managed unless there is some external control over the line level, and even then the operator would need a nonstandard number of hands. Where fades are not contemplated, however, the system should prove eminently satisfactory.

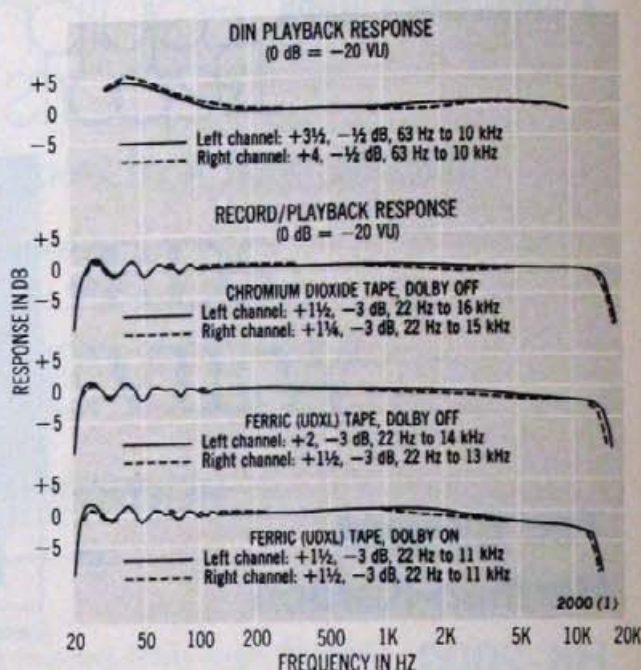
The Dolby-alignment controls are unusual in being accessible on the front panel. They include a spring-loaded button that feeds a test tone from the built-in generator to the tape for recording-level adjustment, the screwdriver controls for this purpose, and (most unusual of all) similar controls to align playback levels as well.

The back panel contains three unusual features. One is a screwdriver adjustment that allows the running speed of the tape to be varied between -14.3 and +22.5%. This control, rare in cassette decks, is useful for playing (live) along with prerecorded material. But one caveat: It is difficult to return to the normal speed once the factory setting has been altered unless you have first acquired a test tape. The second feature is a switchable subsonic filter (especially useful, since with its extended low-frequency response the unit could easily be overloaded by severe rumble or even by disc warps). The third is dual (high- and low-sensitivity) line inputs, often helpful in matching the deck to the particular line levels of your system.

In our use tests, we found that it was no trick at all to make dubs that sounded indistinguishable from the original discs. The meters and peak indicator are easy to interpret, and the logic of the controls is plain—which may account for our making fewer errors than we usually do. Given its excellent performance and extra features—including provision for speed variation, easy Dolby calibration, and a subsonic filter—the Harman-Kardon HK-2000

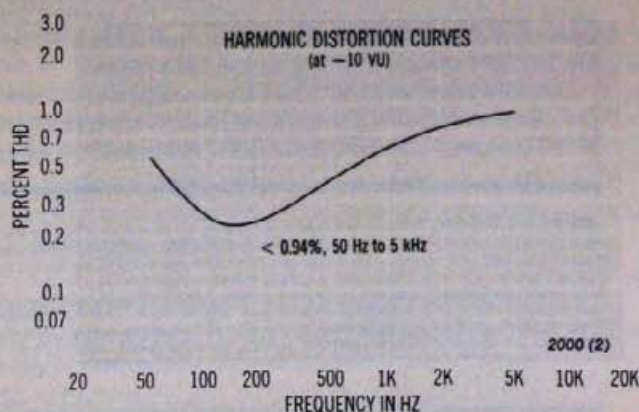
justifies its claim of being a "professional" cassette deck. (The overly simplified instruction manual, incidentally, does not.) In sum, this looks like a cassette deck with which it would be hard to go wrong.

CIRCLE 131 ON READER-SERVICE CARD



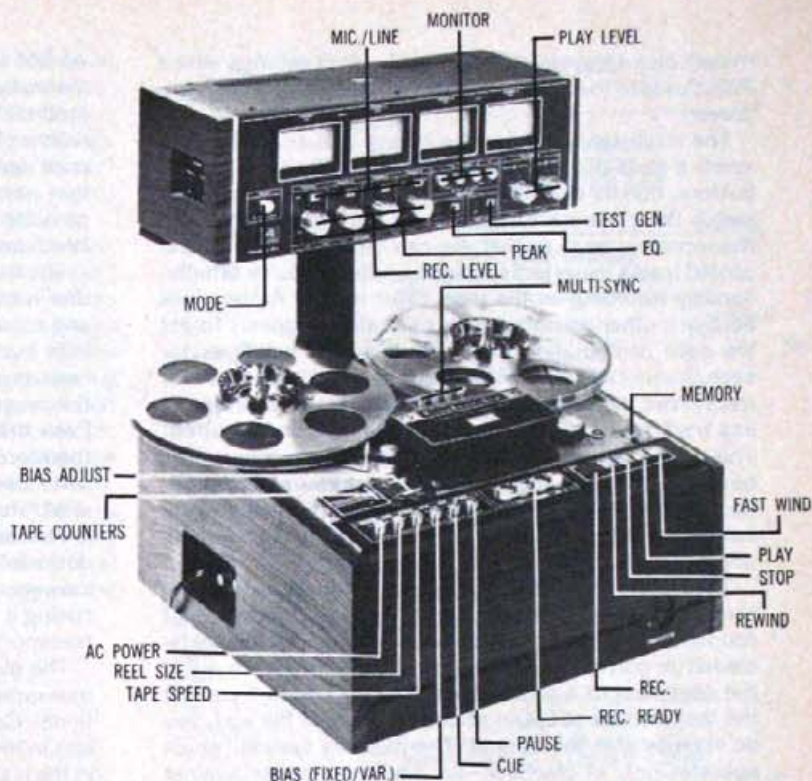
#### Harman-Kardon HK-2000 Additional Data

Speed accuracy	0.30% fast at 105 VAC set exact at 120 VAC 0.16% slow at 127 VAC
Wow and flutter	playback: 0.05% record/play: 0.06%
Rewind time (C-60 cassette)	89 sec.
Fast-forward time (same cassette)	89 sec.
S/N ratio, CBS weighted (re 0 VU, Dolby off)	
playback	L ch: 54 dB    R ch: 54 dB
record/play	L ch: 50½ dB    R ch: 50½ dB
S/N ratio, unweighted (re 0 VU, Dolby off)	
playback	L ch: 56 dB    R ch: 57 dB
record/play	L ch: 54 dB    R ch: 55 dB
Erase (333 Hz at normal level)	64 dB
Crosstalk (at 333 Hz)	
record left, play right	46½ dB
record right, play left	43½ dB
Sensitivity (re DIN 0 VU)	
line (high)	L ch: 350 mV    R ch: 380 mV
line (low)	L ch: 50 mV    R ch: 55 mV
mike input	L ch: 0.24 mV    R ch: 0.24 mV
Meter action (re DIN 0 VU)	
L ch: 3 dB high	R ch: 3 dB high
IM distortion (record/play, -10 VU)	
L ch: 8.0%	R ch: 7.0%
Maximum output (re DIN 0 VU)	
L ch: 2.40 V	R ch: 2.45 V





## Dokorder's "Home-Studio" Model 1140 Deck



**The Equipment:** Dokorder 1140, a two-speed (15 and 7½ ips) stereo/quad quarter-track open-reel tape deck with multi sync and NAB reel capacity, in wood case. Dimensions: 17 by 16 inches (base), 20½ inches high; approx. 1 inch clearance required in back for NAB reels and interconnect cables, 2½ inches at each side for NAB reels. Price: \$1,199.95. Warranty: "limited," two years parts, one year labor; cosmetic parts excepted; shipping not included. Manufacturer: Denki Onkyo Co., Ltd., Japan; U.S. distributor: Dokorder, Inc., 5430 Rosecrans Ave., Lawn-dale, Calif. 90260.

**Comment:** First you look at the deck. Wow—all those switches and knobs and meters and things! Then you open the manual. It begins, "Nobody likes to read these manuals (nobody likes to write them either), but they're important." Frankly we were, if anything, more impressed by the latter than by the former. Not that those switches and knobs don't do things that are worth doing; they do. But so does the manual—particularly on such a complex product—and to find it written not only intelligibly, but with humor and with compassion for the bewildered new owner is a joy indeed. It also happens to be exceptionally informative.

The upper section of the deck—a sort of electronics penthouse overhanging the transport—has pin inputs for the line connections at the back, four phone-jack mike inputs in a well at the right end, and a pair (front and back) of stereo headphone jacks at the left end. The four meters (which, curiously, are calibrated for a 0 VU indication at signal levels about 6 dB below the Ampex standard) are of the averaging ("true VU") type and are backstopped by a peak indicator for each channel, lighting at +8 VU, according to the manual. The four monitor buttons (one for each channel, needed for multi-sync) control both signal output and metering. You cannot, for example, listen to the output from the tape (the level of which is varied, both to the line connections and to the meters, by the playback-

level control) while metering the source input. For this reason we prefer separate meter and signal switching on a deck of this sort, but few manufacturers seem to agree with us. The mode switch either activates all four channels or, when switched to 2-CH, disables the back ones—in both recording and playback.

The most interesting and unusual feature of the electronics package, however, is the test generator, which produces pink noise. In the past we have occasionally examined recorders with sine-wave generators intended for bias adjustment. They are a help, but essentially they leave in doubt the behavior of the tape/bias combination at all frequencies except that produced by the generator. Since the pink noise, in effect, contains all frequencies, it is a better solution to the problem of adjusting the deck to tapes other than those for which it is factory-set.

One position of the bias switch on the transport does deliver factory-set bias; the other position switches in the bias adjustments just behind it, which are normally protected from inadvertent misadjustment by a plastic cover. To use these controls, you turn on the test generator (which automatically switches the meters to an extra-damped mode so that they respond more stably to the pink noise, but not without some wandering) and record this signal. By monitoring playback on the meters (we found listening helps, too, since overbiasing yields audible "dulling" of the noise) you can adjust for maximum output.

The electronics package also has an equalization switch marked NORMAL/SPECIAL. The lab tested the deck (using the fixed bias) with Scotch 212 and the NORMAL position, Maxell UD-35 and the SPECIAL position of this switch. In addition we experimented with TDK Audua, the SPECIAL position, and the variable bias. At the first try, using meters alone, we set the bias somewhat higher than the fixed setting but found we had overdone it; ultra-highs were a little wanting in the sound. When we redid the bias using the



meters plus aural monitoring, the resultant settings were a little closer to the fixed bias and the sound was audibly improved.

The multi-sync feature also is one that (naturally) we spent a good deal of time playing around with. The four buttons, one for each channel, just beyond the head cover switch the playback function from the playback head to the recording head so that you can listen to previously recorded tracks in perfect sync with whatever you're simultaneously recording on the tape. (This is what Ampex calls Sel-Sync; other manufacturers have other names.) To get the right combination of play and record functions for each channel you must use three sets of buttons: those for MULTI-SYNC, RECORDING-READY (which prevent recording in any track for which they are switched off), and MONITOR. This can be rather confusing since all twelve buttons must be examined (not just glanced at) to make sure which position each is in. We would have preferred the unequivocal visibility of lever, toggle, or slide switches for these functions.

The counter and memory system is one we have come across only in Dokorder products. There are two four-digit counters, one whose tally rises as the tape is being recorded (or played), one whose tally lowers. When you are at the beginning of a passage you want to "mark," you set the first counter to 0000; when you come to the end, you do likewise with the second. The memory system (which operates only in playback—an intelligent hedge against misadventure while you're recording) can be switched off, set for automatic stop, or made to repeat indefinitely. If you rewind in AUTO-STOP, the machine will search for the 0000 setting on the upward counter, then stop the tape

while it waits for the next command; in REPEAT it will automatically begin playing the tape at this point. In either mode it will stop playback when the downward counter reaches 0000 and rewind to 0000 on the upward counter once again. Quite nifty for instant playback, studying certain passages (say, to make sure you've made the best possible edit), or rehearsing difficult multi-sync overdubs in advance of recording them.

The PAUSE has two advantages: It allows startups (in either recording or playback) that are considerably quicker and more noise-free than those available via the STOP and PLAY buttons alone, and it allows you to keep the unit in recording for stop-and-start work, where it's easy to miss the recording button now and then when you start up. Even the PAUSE leaves a slight glitch on the tape and is therefore a hair less self-effacing than those on typical cassette decks, but it's far better in this respect than the start/stop action on most open-reel equipment.

The CUE, too, offers a significant advantage over some decks in this class. It is simply a tape-lifter defeat that allows you to hear what's on the tape while you're manually cueing it for splicing. On some decks you have to fight the transport mechanism to do this—if you can at all.

The playback and record/play response of the 1140 as measured at CBS is certainly good, though not exceptional. Considering that the record/play data show some loss in the deep bass at 15 ips (which is usual) but less loss in the high treble at 7½, without any marked difference between the two speeds in terms of distortion, we would tend to choose the lower speed (which, in addition, cuts tape costs in half) for most work. We might have preferred 3¼ ips, rather than 15, as the second speed. Most multi-sync

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## Noise and Distortion—Our New Approach

Engineers often refer to conventional total harmonic distortion measurements as "total garbage" because that's just what they express: everything except the desired signal, including noise as well as distortion. The usefulness of such figures varies with the subject at hand. In measuring tape equipment, where noise is inherently high, classical THD figures say relatively little about distortion as such. It has always been paradoxical that tape recorders in which no distortion could be heard had THD figures that would indicate audible distortion. Beginning in this issue's reports on tape equipment, distortion is measured by means of spectrum analysis, a technique that identifies the individual harmonics and distinguishes them from the noise. Tape recording by its nature produces distortion that is characterized by the unwanted introduction of the third harmonic—three times the fundamental tone's frequency—into whatever signal is used. Hence, with the new distortion-only technique, it can generally be assumed that in the lab's THD results it is third-order harmonic distortion that predominates. Naturally, with the noise contribution removed, the THD measurements are much lower and cannot be compared with conventional "total garbage" harmonic-distortion numbers.

As to the noise itself, we have for years printed "unweighted" figures, which represent a straight measure of absolute noise with no attempt to "tailor" it to the audibility of the noise. "Weighting" is a method that purports to represent

audible rather than absolute noise. Such schemes have existed for years, but none appeared satisfactory for full-audio-band measurements. (The CBS ARLL curve for rumble figures and similar weighting systems address themselves only to the bass.) Without weighting, hiss at the extreme top of the audio range (where it is highest in absolute level) and AC hum at 60 Hz have as much influence on the measurement as noise at, say, 2 kHz. Yet the ear is far more sensitive to the latter than it is to either of the former, particularly at the extremely low levels to which noise has been driven in modern componentry. What we needed was a new weighting system that would truly represent the audibility of the noise with normal hearing and at normal playback levels.

CBS Technology Center, after a thorough study of the available data on noise audibility (literature to which the lab itself has made valuable contributions), has come to the conclusion that—at last—there is sufficient consensus on the characteristics of low-level-noise audibility that a weighting curve can be derived from it with confidence. That CBS weighting is being used in this month's reports for the first time. It is coincidental that the weighted and unweighted figures are as close as they are, for there is no necessary correlation between them. For the time being, to preserve comparability with earlier reports, both figures will be given. However, for greater accuracy in comparing the audible noise in tape equipment, the new figures should be used.



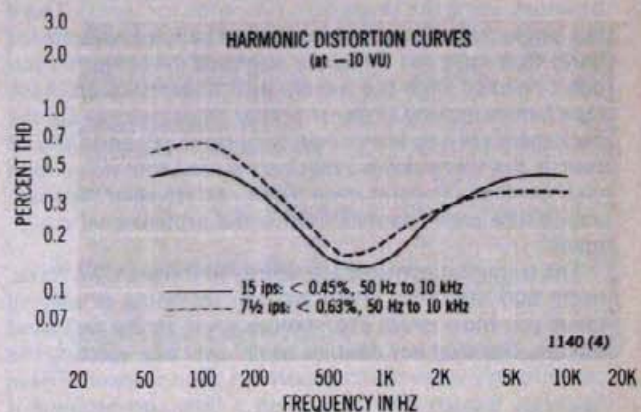
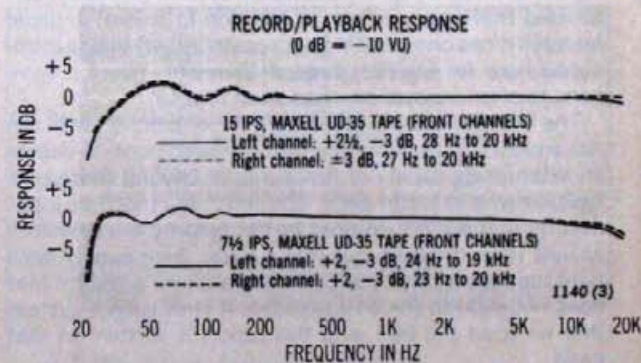
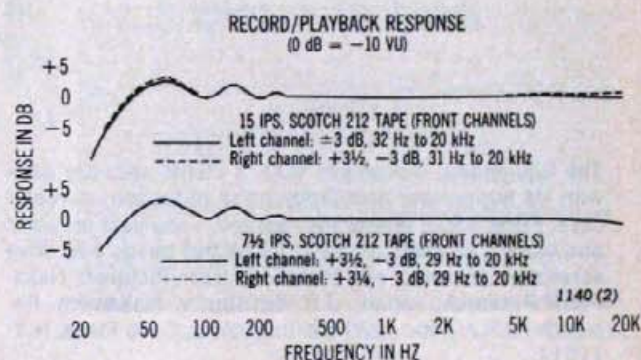
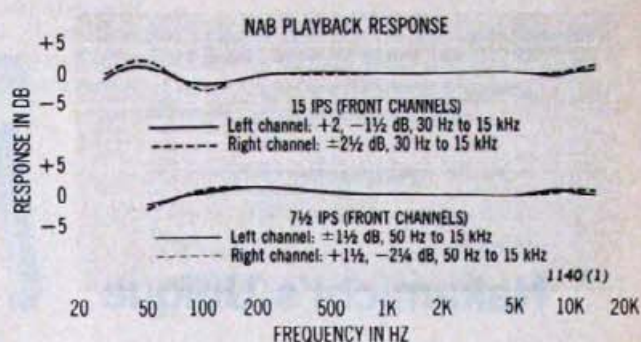
users (which, to a large extent, is what the 1140 is all about) probably would disagree on this point. Speed accuracy and stability are very fine indeed, and distortion is very low. Back-channel performance generally matches that of the front channels very closely; for simplicity and clarity we have shown only the front-channel data except where that for the back channels differs materially.

All told, this is the most impressive Dokorder we have yet tested. Its construction and finish seem markedly better, its performance finer, and its multiple capabilities—always dazzling in their variety for any given price class on decks from this company—somewhat better thought-out in their interrelationships. Whether these capabilities are exactly the ones any individual user may need is a question that must—as always—be left to the user; but a wide spectrum of potential buyers owe it to themselves to consider the 1140 carefully. It has a great deal going for it. Incidentally, it is delivered with an empty NAB reel, a pair of NAB reel adapters, and the usual patch cords; a remote transport control—which we did not test—is an optional extra that plugs into the front of the unit's base, and rack-mounting adapters are available.

CIRCLE 132 ON READER-SERVICE CARD

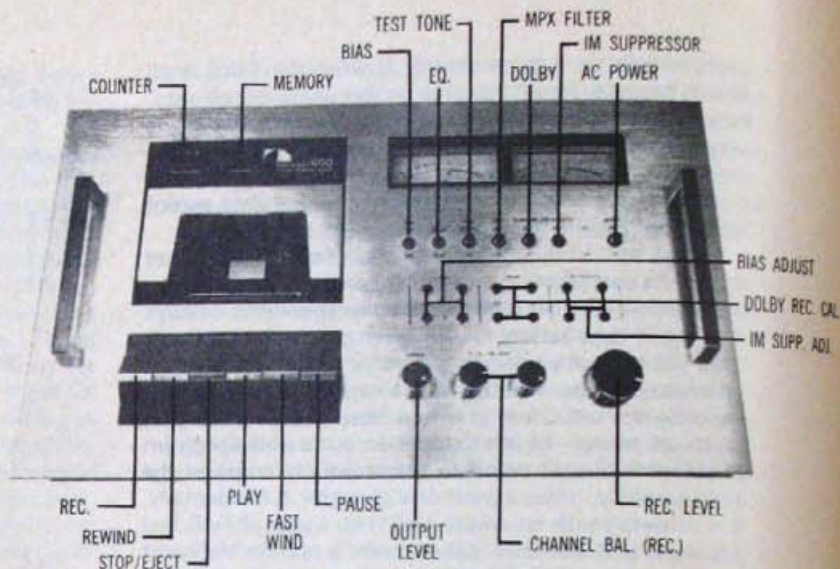
## Dokorder 1140 Additional Data

<b>Speed accuracy</b>		
15 ips	0.05% slow at	
	105, 120, & 127 VAC	
7½ ips	0.13% slow at	
	105, 120, & 127 VAC	
<b>Wow and flutter (ANSI weighted)</b>		
15 ips	playback: 0.04%	
	record/play: 0.05%	
7½ ips	playback: 0.04%	
	record/play: 0.06%	
<b>Rewind time, 7-in., 1,800-ft. reel</b>		90 sec.
<b>Fast-forward time, same reel</b>		90 sec.
<b>S/N ratio (re Ampex 0 VU, CBS weighted)</b>		
playback	L ch: 56 dB	R ch: 53 dB
record/play	L ch: 51½ dB	R ch: 49½ dB
<b>S/N ratio (re Ampex 0 VU, unweighted)</b>		
playback	L ch: 56½ dB	R ch: 56 dB
record/play	L ch: 53 dB	R ch: 52 dB
<b>Erasure (400 Hz at normal level)</b>		73 dB
<b>Crosstalk (at 400 Hz)</b>		60 dB
<b>Sensitivity (re Ampex 0 VU)</b>		
line input	L ch: 60 mV	R ch: 68 mV
mike input	L ch: 0.22 mV	R ch: 0.25 mV
<b>Meter action (re Ampex 0 VU)</b>		
front channels	L ch: 6 dB high	R ch: 6½ dB high
back channels	L ch: 5½ dB high	R ch: 5½ dB high
<b>IM distortion (record/play, -10 VU)</b>		
15 ips	L ch: 0.13%	R ch: 0.12%
7½ ips	L ch: 0.13%	R ch: 0.12%
<b>Maximum output (line, Ampex 0 VU)</b>		
	L ch: 1.40 V	R ch: 1.60 V





## Nakamichi's Unique and Fascinating 600



**The Equipment:** Nakamichi 600, a stereo cassette deck with IM Suppressor and Dolby noise reduction, in metal case. Price: \$500. Warranty: "limited," one year on parts and labor, two years on parts for all but heads and drive assembly; shipping not included. Manufacturer: Nakamichi Research, Japan; U.S. distributor: Nakamichi Research (U.S.A.), Inc., 220 Westbury Ave., Carle Place, N.Y. 11514.

**Comment:** We use the word "unique" in our headline on two grounds. First, this is not a typical cassette deck designed to do its thing in just any old system (though it can be used that way); second, in addition to several unusual features it has one (the IM Suppressor circuit) that is introduced here for the first time. Nakamichi—never a company to shun innovation—has done it again.

The 600 was conceived to work in conjunction with the Nakamichi 610 preamplifier (not reviewed here) to deliver an astonishing variety of functions far beyond those of a typical home cassette deck. The functions (such as input mixing) that are pre-empted by the preamp are therefore absent from the 600; but it is a basic, high-quality deck (and then some) that you can integrate into a system that does not include the 610 preamp. It is in such a system that we used the 600, and this report is written on that basis.

The recording level controls consist of a pair of channel-balance knobs plus a master fader (a system we like because it allows you to preadjust and then forget channel balances, using the single REC LEVEL knob for fades). There is a single output control (no channel-balance adjustment here) that does not influence playback metering (so you don't need to align the meters with a standard playback tape before making Dolby or similar adjustments). On the back there are only line connections (both pin and DIN), of course, but there also is a block-schematic that will remind you how the unit works even if you've misplaced the manual—a nice idea adapted from some professional equipment.

The transport controls are similar to those in the Nakamichi 500 and 550. When you are recording or playing tapes you must press STOP before going to the fast-wind modes. The stop key doubles as an eject key, ejecting the cassette only when the transport has been stopped. These features, though they may seem a little cumbersome if

you're used to fast-wind without the interlock or a separate eject key, are sensible, gentle on the tape, and practical, in our opinion. On this model (unlike other Nakamichis) you can make unattended recordings with an inexpensive timer. With the power off, you set up for recording (or playback, if you want to use the 600 as an alarm clock) and pause. A few seconds after the timer turns on the AC, the pause releases by itself. (Incidentally, this design causes the stop key to release the pause key as well.)

Even more important are the front-panel adjustments. Screwdriver pots protected by tiny plastic caps (which are easily lost, so watch it) are provided for individual settings, in each channel, of bias, Dolby recording level; and IM-Suppressor action; and each of these sets of adjustments is repeated for two different tapes (essentially, ferric and chrome). Dolby recording controls have been standard on Nakamichi decks (and are making a gradual reappearance at the high ends of other brands). They allow you to tune Dolby action to the sensitivity of the tape in use. The bias adjustments allow use of tapes significantly different from those for which the 600 is preadjusted, but most users would be well advised to leave this—and certainly the IM-Suppressor adjustment—to a competent service technician.

The action of the IM Suppressor is broader than its name implies. Both harmonic and intermodulation distortion arise from nonlinearity in the recording characteristic as the tape approaches saturation. The Suppressor operates only in playback (where it can be more effective than "predistortion" of the input waveform to compensate for the anticipated nonlinearity) and almost exclusively at levels higher than those encountered with tapes recorded "correctly" on other equipment. Its primary use, therefore, is as an alternative to a limiter for tapes to be played on the 600. And it works. Though CBS Technology Center could find no significant change in distortion or response at "normal" levels with the IM Suppressor on, at 0 VU (DIN—a level about 2 dB above that indicated, at Dolby level, on the meters) the Suppressor cuts THD from 1.4 to 0.63% with a 400-Hz test signal. Raising the level increases distortion rapidly with the Suppressor off, slowly with it on. The 3% distortion point (reached at a little over +2 VU without the Suppressor) is thus pushed up to about +4½ VU—very close to the levels represented by the +7 to which the top of the Nakamichi meters is cali-

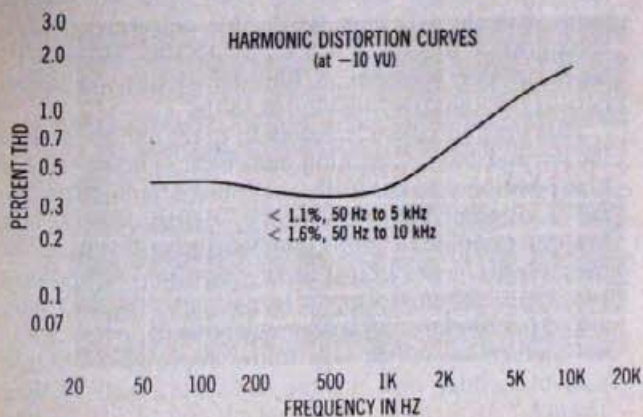


brated. In other words, the lab confirms that the IM Suppressor adds several dB to the effective headroom of the deck. Incidentally, the peak-reading meters read not only to +7 at the top, but (like other models in the line recently) to -40 at the bottom.

The equalization switch is marked in actual time constants (120 and 70 microseconds) instead of the usual FERRIC and CHROME. One reason for this is that the "chrome" tape for which the 600 is preadjusted is not a chrome formulation at all—it's Nakamichi SX, a ferricobalt that is interchangeable with TDK SA. (See the tape reports in this issue.) Hence the chrome bias setting is marked SX. Similarly, the ferric setting is marked EX. The latter is preadjusted for Nakamichi EX II, which is interchangeable with Maxell UDXL. SX and EX II are the tapes used by CBS for the lab tests. Other tapes to which the 600 provides an excellent match are Nakamichi EX, Maxell UD, Fuji FX, and TDK Audua. The owner's manual—which is top-notch—spells out all this in no uncertain terms. We have also used Scotch Master with the 120/EX settings and various chrome tapes with the 70/SX settings, to good effect. Other ferrics generally are wanting in high-end response (particularly with Dolby) unless the unit is readjusted for them.

The lab data show the 600 to be a really fine machine. The response curves are astonishing for a deck with a combination record/play head since they penetrate into territory that has been almost owned by monitor-head machines like Nakamichi's own 1000. This is one deck in which the usual undefeatable Dolby multiplex filter to suppress any 19-kHz pilot in the signal would measurably have compromised performance. Distortion, noise, wow, and so on, all are excellent. The drive speed, while unaffected by line voltage, is a little farther from exact (a hair over 1% fast) than we would expect on a deck of this class, but it should bother only the most fastidious of users. What does not show in the lab data is the excellent phase linearity (which few other cassette decks seem even to strive for), required by the IM Suppressor but paying off as well-defined transients.

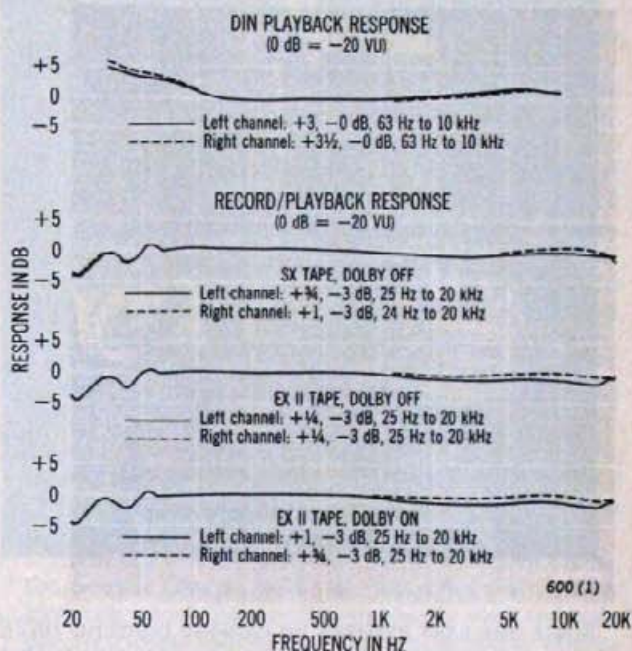
And the 600 most certainly is handsome—despite two significant shortcomings of its cosmetics. First, Nakamichi has put no dust-resistant lid on the cassette well. This makes for easy access to the heads (for cleaning, etc.) but requires that you use the supplied smoked dust cover to keep foreign matter out of the well—a nuisance that might easily have been forestalled. We would rather have to dust the whole front panel than search for a place to set the cover each time we use the unit. Second, the small black buttons are so designed and placed that when one is in perfect position for using the deck—whose angled face in every other respect represents excellent human engineering—it is impossible to tell whether the buttons are in or



out. Toggle switches, or something similar, would be a big improvement.

In so attractive, original, and capable a design, however, any misjudgments of this sort are easily put up with. This deck's manifest advantages are impressive indeed.

CIRCLE 133 ON READER-SERVICE CARD



## Nakamichi 600 Additional Data

Speed accuracy	1.16% fast at 105, 120, & 127 VAC
Wow and flutter	playback: 0.04% record/play: 0.06%
Rewind time (C-60 cassette)	112 sec.
Fast-forward time (same cassette)	110 sec.
S/N ratio (re 0 VU, Dolby off, CBS weighted)	
playback	L ch: 52 dB      R ch: 52½ dB
record/play	L ch: 49 dB      R ch: 49 dB
S/N ratio (re 0 VU, Dolby off, unweighted)	
playback	L ch: 50 dB      R ch: 50½ dB
record/play	L ch: 48½ dB      R ch: 49½ dB
Erase (333 Hz at normal level)	71 dB
Crosstalk (at 333 Hz)	
record left, play right	45 dB
record right, play left	43 dB
Sensitivity (re DIN 0 VU)	
line input	L ch: 88 mV      R ch: 93 mV
Meter action (re DIN 0 VU)	
L ch: 2 dB high	R ch: 2½ dB high
IM distortion (record/play, -10 VU)	
L ch: 2.8%	R ch: 2.3%
Maximum output (re DIN 0 VU)	
L ch: 760 mV	R ch: 820 mV





## Tests of Twenty-One Premium C-90 Cassettes

SINCE OUR LAST REPORTS on cassette tapes (in 1973), many new formulations have come onto the market and our ideas on the subject of tape testing have changed somewhat. So a new round of testing seemed in order. We decided to test only national-brand premium C-90 tapes (top formulations from any given company and in any given class) and only types that had appeared on the market since our last evaluation. Our list came to twenty-four tapes. One soon dropped out because we could get samples neither from the company nor at retail—meaning, presumably, that it was not as “national” as we had at first supposed. The field was narrowed further when we discovered that two tapes were not available in C-90 format. (See note at end of “Ferrichrome C-90 Tapes.”)

We changed from the C-60 standard of 1973 to C-90 because that's what you appear to buy most of; all the companies we have queried on this point agree that C-90 is by far the most popular length. This was somewhat discouraging news. Though a C-90 will hold most of the major works in the symphonic repertoire, uninterrupted, on one side—and do so at a lower cost per listening hour than the shorter lengths—its thinner tape exacts a price in technical performance. Print-through tends to be higher, saturation levels lower, sensitivity—particularly at low frequencies—poorer. Not by much, perhaps; but we felt it unfair to use C-60s for data you might be using to choose between C-90 brands.

An important change in the test procedure (at CBS Technology Center) is in the matter of biasing and equalization. As before, we used a Nakamichi 1000, whose separate playback head—in addition to offering extreme frequency bandwidth—makes possible the Maximum Recorded Level (overload) curves shown in the graphs. In 1973 the 1000's tape switch-

ing allowed for low-noise ferric tapes (specifically, Maxell UD) with the standard ferric (120-microsecond) equalization, and chromium dioxide (TDK's was the “tape of record”) with chrome (70-microsecond) equalization. The tapes introduced since then have caused Nakamichi to change its reference tapes. Maxell's UDXL, like UD, requires a bias about 15% higher than that “preferred” by average ferric tapes; UDXL is, essentially, the tape available as Nakamichi EX II, which has replaced the older UD as the reference ferric tape. TDK's ferricobalt SA has the same bias requirement as chromes (and similar overload characteristics, to allow use of the chrome equalization); its Nakamichi counterpart, SX, has become the present “chrome” reference.

Fine, but some ferric tapes prefer the lower bias available in the ferric settings of many cassette decks (particularly the older or less expensive models) and in the NORMAL or STANDARD tape setting on a few units that offer three-position switching (say, STANDARD/HIGH/CHROME, the HIGH position representing the extra 15% for UD, et al.). Last time, we tested them with the UD bias, while this delivered useful comparative results, it did make all the “standard” tapes appear wanting in high-frequency response because of the overbiasing for them.

This time we asked Nakamichi to set up the 1000 in the normal way except that one channel in the ferric-bias position was carefully readjusted to match TDK SD—a common “tape of record” before Maxell UD became popular for better decks, and still typical in bias requirement of most ferric cassettes on the market. Thus, when testing a ferric tape, the lab was asked to compare the frequency runs for each channel, determine which was flatter (because of better bias matching), and run the remaining tests in that channel. As a result, the tapes closest to SD in bias



requirement are tested with the "standard" bias setting—and the ferric standard equalization of 120 microseconds. The "hotter" ferrics are tested with the 15%-greater bias (called "high" in the reports) for EX, EX II, etc. And the chromium-dioxide and compatible ferricobalt tapes are tested with the SX bias (called "chrome" in the reports) and the 70-microsecond ("chrome") equalization. These specifics are indicated in the upper left corner of each performance graph.

The top line in each graph is the Maximum Recorded Level curve, showing the point at which the tape is driven to 3% distortion (in the midrange and lower treble) or into self-erasure (which, at the high end, occurs before 3% THD is reached). It is, therefore, the performance ceiling for the tape with the given bias and equalization. The Relative Sensitivity curve shown (at approximately -30 on the left scale) may be thought of as frequency response with the indicated bias and equalization. Naturally a machine with different bias and recording equalization (the two can, to some extent, be juggled with respect to each other for similar results) will not necessarily produce the same curves. This is why we use the word "relative": If the tape you use has a descending high end in our graph but sounds flat on your deck, SD presumably would have a rising high end on your deck instead of the flat response that our test deck was set to deliver with it. It's all relative.

The calibration at the left of these graphs is in dB with respect to DIN 0 VU (technically, a recorded level of 250 nanowebers per meter on the tape—approximately 2 dB above the 200-nanoweber Dolby-level standard). If we have tested your deck in our equipments reports, we will tell you at what level your meters would read for the graph's 0 dB. If, for example, we report that your meters read "3 dB high," the DIN 0 VU is shown as +3 VU on your meters; conversely, the 0-VU mark on your meters is at -3 dB on the graphs. If we have not tested your model but its meters show a Dolby (or ANRS) calibration point, that point on your meters would fall at approximately -2 dB on the graphs. This information will help you relate the MRL curve and other data to the signal levels read on your equipment.

The data are shown in terms of recorded level on the tape. To do this, the lab had to adjust the input voltage of the test signal to deliver the required output level—that is, to "correct" for tape sensitivity. This is, essentially, what you do when you adjust a deck's Dolby recording level with a given tape, and the data therefore represent the values for a correctly adjusted Dolby deck. The degree of adjustment required, with respect to the "standard" tape of each of the three types, is shown as the Relative Sensitivity Rating at 400 Hz. A tape with, say, 2 dB more output than the standard formulation will therefore have a rating of +2 dB.

If you use this hypothetical tape on a deck adjusted for the standard tape, not only will the Dolby calibration be off by 2 dB, but you will be recording at levels 2 dB higher than those in a correctly adjusted deck—that is, for any given input level the recorded signal will be 2 dB closer to the MRL curve. To compensate for this, you would have to move the presumed level of your meters' 0 VU upward by 2 dB

on our scale. But since 2 dB of Dolby mistracking already threatens audibly degraded performance, you're better off either adjusting Dolby tracking for the new tape or sticking with one closer to the sensitivity for which your deck already is adjusted—and, therefore, staying with your original determination of the relationship between our dB scale and your meters.

Noise is measured (using the CBS weighting explained in this month's "Equipment Reports" section) in so many dB below the DIN 0 VU, with the deck's Dolby circuit turned off. One word of caution, however: Though the lab used a particularly noise-free deck (the Harman-Kardon 2000) for these measurements, the tape noise is so close to that of the deck that the noise differences between tapes may be minimized. And there is very little difference in the noise measured—except in comparing the tapes tested with standard equalization against those measured with chrome equalization, which lowers high-frequency output specifically to suppress tape hiss.

Before we go on to examine the test results tape by tape, we should note a number of ancillary considerations that may or may not be of importance to you, depending on your equipment, your habits with a recorder, and your general persnickiness about the tapes you make.

All of our test samples except the Memorex MRX<sub>2</sub>, the Scotch Classic, and the Columbia have screw closures, which these days universally seem to imply pin-and-wheel internal guides as opposed to Memorex's fixed posts. There are legitimate arguments on both sides of this design question, but the screw closure appears to be winning, at least among the top brands. Ampex, Memorex, and Scotch Classic all have oversize pressure pads—a hedge, in our opinion, against poor tape-to-head contact due to poor pad alignment.

Some case designs contain special internal features to promote even winding, minimize snags, and so on. BASF's Special Mechanics, built into the Studio C-90, is one example; another, consisting of sliding internal guides that can be seen through the transparent shell, are used in the Audio Magnetics and Lafayette XHE shells.

A few brands are beginning to dispense with leader tape—an idea about which there are, again, conflicting technical opinions. Our samples of Audio Magnetics, Capitol (the chrome only), and Lafayette all have no leader. Maxell, in the UDXL cassette, uses the head-cleaning leader it has been offering in UD. The rest all appear to have conventional transparent or translucent leader.

The finish and fit of parts is generally good to excellent in our test samples—as one might expect with premium tapes. Judged least attractive in this respect were the cassettes from Royal Sound, Columbia, Radio Shack, and Certron. Internal friction (which can promote wow with a weak or misadjusted drive system) was judged markedly higher in the Scotch cassettes than in the others.

Audio Magnetics' stick-on labels provide the most generous space of any cassette-shell labeling system. Maxell, whose UDXL shell comes unlabeled, and Columbia, whose vivid label color defies neat erasure, both provide stick-ons. Also bearing annoying col-



ored labels are BASF, Capitol's chrome, Certron, Memorex, and Nakamichi. The labeling space is cramped on the Ampex, BASF, Certron, and Realistic shells.

Most brands come (or are available) in standard Philips-style plastic boxes, which—as we've said in the past—is a hard design to beat. Generally the paper insert is a very practical labeling medium. Among the notable exceptions, Columbia's is of poor quality, Nakamichi's is cut up by punch-out holes, Scotch fills up the "spine" (all that is visible in normal storage) with timing information on the Master—a goof 3M says it is remedying.

Of the special boxes, the Memorex looks jazziest, but it is least practical for labeling and has loop-prevention plugs that are easily lost. We find the Capitol drawer-style interlocking boxes cumbersome and skimpy on label space. The Scotch C-Box strikes us as a little better, but not much. Fortunately, both Scotch and Capitol give the Philips-box option. In our samples, the BASF, Fuji, Maxell, Nakamichi, Scotch, and TDK Philips boxes have eliminated those little holes originally intended for an antipilfer display system. Since we've never seen this system used in stores, and since the holes let in dust, we

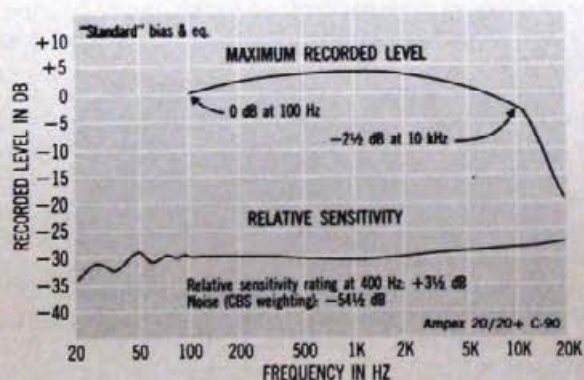
hope other manufacturers will follow this lead. Maxell's box, incidentally, is a redesign that seems more break-resistant than the others.

The prices shown are suggested retail or catalogue values supplied by the manufacturers or distributors. Many brands are, however, subject to wide price variation. So a brand that appears to be a good buy in these reports may not necessarily be when you come to compare prices in your area.

And one last note. There are three pairs of cassettes on our list that, as far as we can tell, are made in the same factories and contain the same tapes. The pairs are Audio Magnetics XHE and Lafayette XHE; Maxell UDXL and Nakamichi EX II; and TDK SA and Nakamichi SX. (Neither Nakamichi nor Lafayette has its own tape manufacturing facilities.) You will see that test results for the two tapes in each pair are very similar but not identical. This is to be expected; it can, in fact, be taken as an index of the variations to be anticipated in any tape type, even among premium varieties. Keep that in mind as you view the test results. The data shown represent one sample of each type, and the cassette you buy should be expected to provide similar but not necessarily identical performance.

## "Standard" Ferric C-90 Tapes

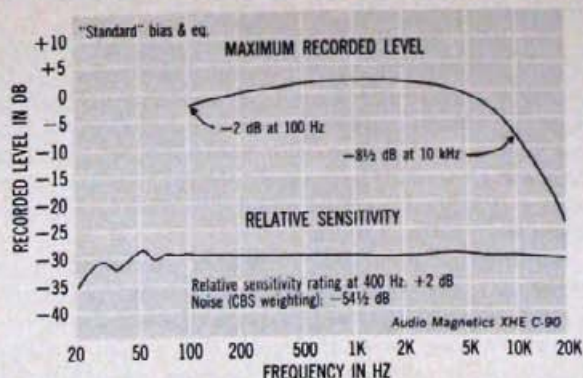
*As a group, the quality of these tapes is very close indeed to that of the "special" formulations and is both higher and more consistent (so far as the changes in test procedures allow us to judge) than comparable tapes three years ago.*



### Ampex 20/20+

The top Ampex ferric turned out to be the most sensitive tape tested in this group, and—more important—the MRL curve shows the greatest headroom throughout the most important range, from 100 Hz to 10 kHz. It can, therefore, be recorded at appreciably higher levels than typical "standard" ferrics. The gently rising high end in the RS curve suggests that it prefers slightly higher bias than our reference tape, but there certainly is no severe mismatch. Price: \$5.29; also sold in C-45, C-60, C-120.

CIRCLE 134 ON READER-SERVICE CARD



### Audio Magnetics XHE

XHE is, as the data show, an excellent tape both in performance characteristics and in matching the "standard" bias, though its output is a little (2 dB) higher than that of the reference tape. The RL curve holds up particularly well at both frequency extremes. Price: \$3.49; also sold in C-45, C-60, C-120.

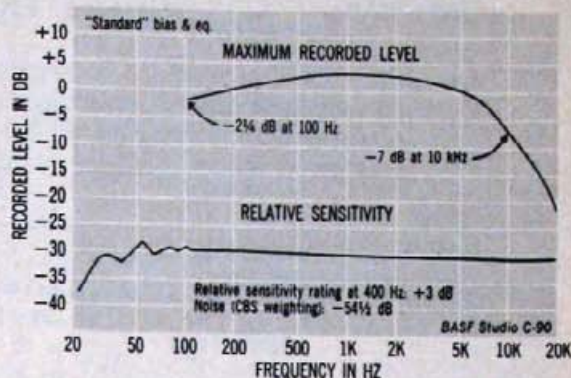
CIRCLE 135 ON READER-SERVICE CARD



## BASF Studio

The top BASF ferric has an excellent MRL curve, a very smooth RS curve down to all but the very deepest bass (where its slight falling-off is hardly cause for complaint), and relatively high output (3 dB above that of the reference tape). It is definitely among the best of the tapes in this group. Price: \$4.49; also sold in C-60, C-120.

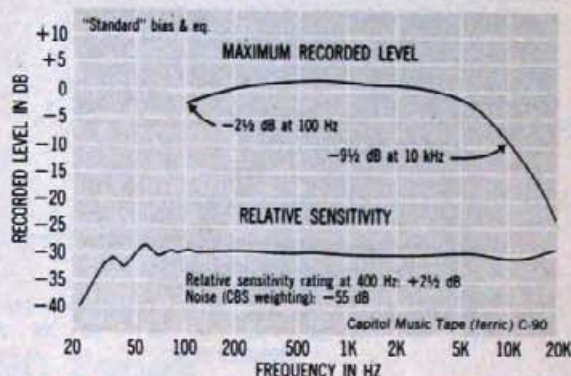
CIRCLE 136 ON READER-SERVICE CARD



## Capitol Music Tape

The top ferric entry in Capitol's line (the chrome also is called The Music Tape) has a good RS curve, despite some falling-off in the extreme bass. Its MRL curve represents the approximate average for this group of premium "standard" ferrics. Sensitivity is on the high side, noise is among the lowest measured in this group. Price: \$3.59 in standard Philips box; also sold in C-45, C-60, C-120; available as well in special stacking boxes.

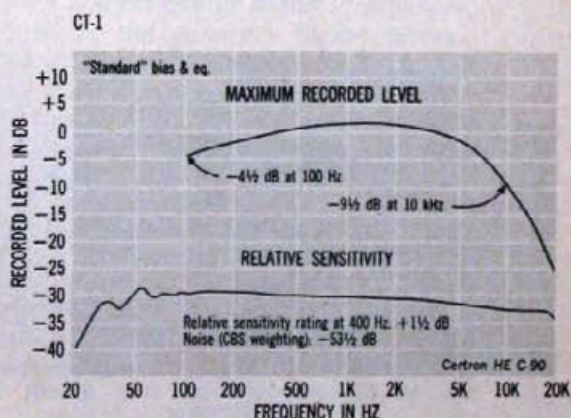
CIRCLE 137 ON READER-SERVICE CARD



## Certron HE

HE, incidentally, stands for High Energy Gamma—Certron's designation for its top ferric. It turns out to be above average for this group. There is some falling-off toward the frequency extremes between its RS curve and that of the reference tape. Noise is a hair higher than that of the others. Price: \$2.39; also sold in C-60, C-120.

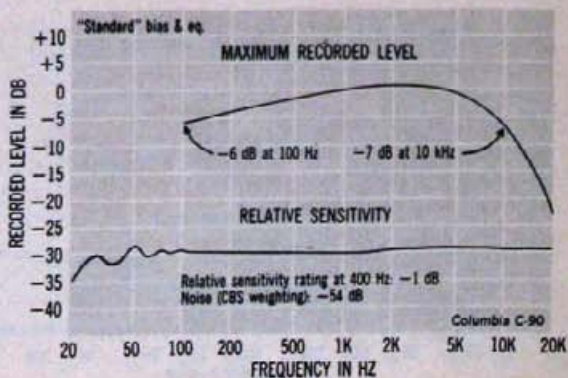
CIRCLE 138 ON READER-SERVICE CARD



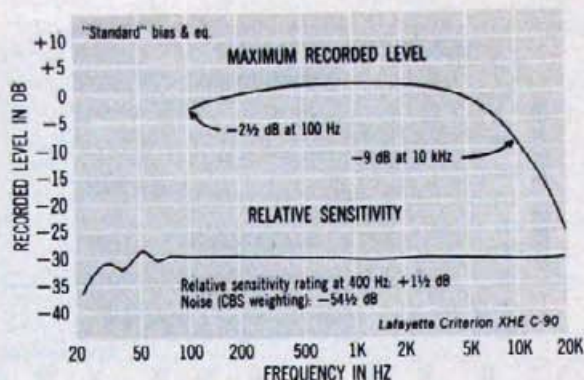
## Columbia

The RS curve shows good response to the frequency extremes in the test setup. The MRL curve is best in the range just above 1 kHz but poorer elsewhere. In particular, the want of headroom between 200 Hz and 1 kHz suggests that care must be taken, with typical music, to avoid overload. Sensitivity is on the low side and noise a bit high for this group. Price: \$3.29; also sold in C-40, C-60, C-120.

CIRCLE 139 ON READER-SERVICE CARD



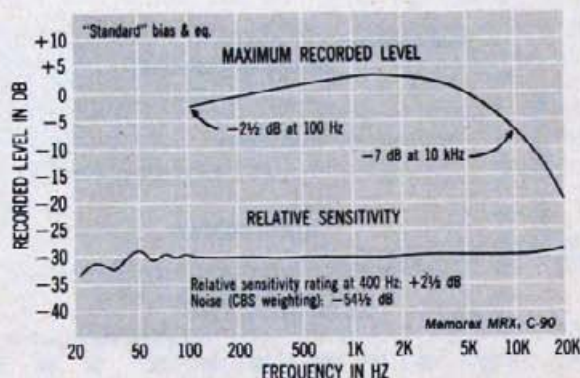




## Lafayette XHE

This, the top of Lafayette's Criterion line of ferric tapes, is very similar (presumably identical in manufacture) to Audio Magnetics' XHE. It is, therefore, equally excellent. Price: \$3.99; also sold in C-60, C-120 (through Lafayette Radio stores only).

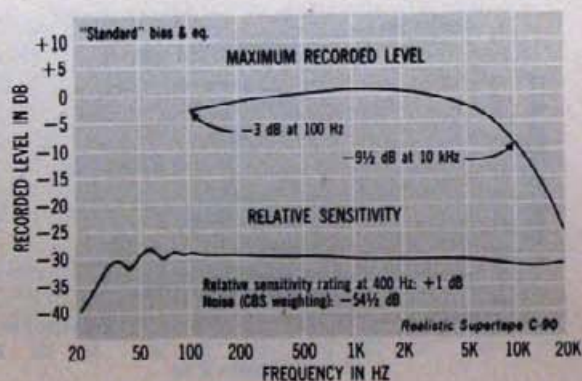
CIRCLE 140 ON READER-SERVICE CARD



## Memorex MRX<sub>2</sub>

The improved Memorex ferric (we tested the older formulation in 1973) displays excellent headroom in the upper midrange (the hump in the MRL curve), less in the critical range just below 1 kHz. Sensitivity, with our test setup, rises slightly at the extreme top, falls off a little at the extreme bottom, but without materially compromising the smooth RS curve. Sensitivity is relatively high. Price: \$3.59; also sold in C-30, C-45, C-60, C-120; not available in Philips box.

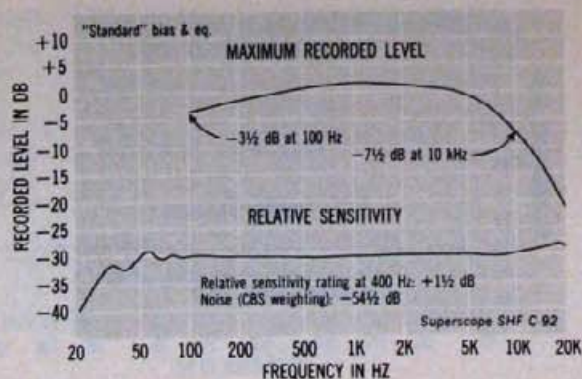
CIRCLE 141 ON READER-SERVICE CARD



## Realistic Supertape

Radio Shack's "laboratory standard" cassette has a very good RS curve, despite the slight dip toward the top and a marked falling-off in the extreme bass, and a fair MRL curve. Sensitivity and noise are about average. Price: \$3.19; also sold in C-45, C-60, C-120 (through Radio Shack stores only).

CIRCLE 142 ON READER-SERVICE CARD



## Superscope SHF (C-92)

The Super High Fidelity tapes, Superscope's best, are rated for one extra minute of playing time on each side by comparison with standard lengths. Its RS curve is good, with only a slight peak at the high end and a noticeable rolloff only in the extreme bass. The MRL curve is about average for this group, sensitivity slightly higher than average. Price: \$2.79; also sold in C-62, C-122.

CIRCLE 143 ON READER-SERVICE CARD



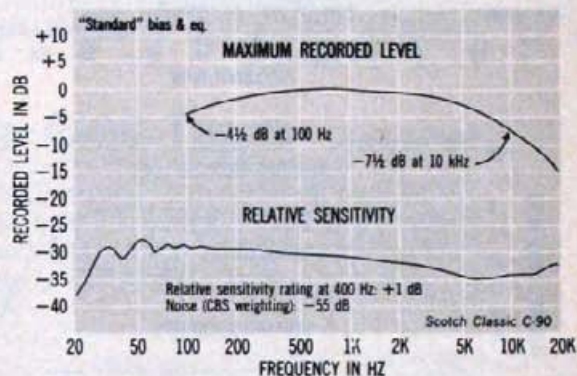
## Ferrichrome C-90 Tapes

The chrome layer (over a ferric layer) on these tapes generally is claimed to deliver better high-frequency response and headroom than ferrics; that the only brand available in C-90 here does not bear out the former claim should not be interpreted as a comment on other ferrichromes that are supposed to take higher bias.

### Scotch Classic

The ferrichrome entry from 3M surprised us. We had expected that, with its chrome layer, it would respond best to the higher ferric bias. On the contrary, even with "standard" bias, there is a significant dip in high-frequency sensitivity. The chrome layer certainly contributes to the excellent headroom at the very top; at lower frequencies the MRL curve is not impressive. The noise measurement equals that of the quietest standard ferric tested. Price: \$3.99; also sold in C-45, C-60; in C-Box (C-60 and C-90 only), 50 cents extra.

CIRCLE 144 ON READER-SERVICE CARD



Note: We also had planned to test two other ferrichromes—the Duad cassettes from Sony and Meriton—but neither is available in this country in the C-90 length on which all our tests of competing tapes are based.

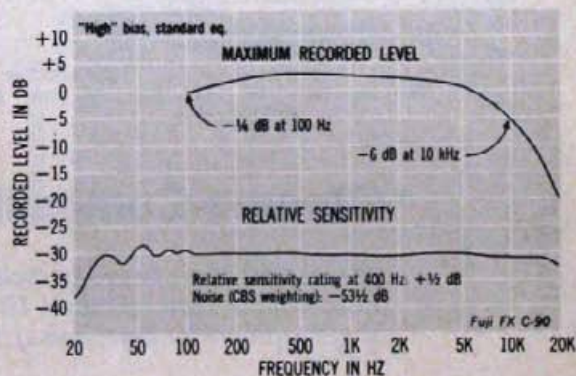
## "Hot" Ferric C-90 Tapes

This group is, on average, a little higher in sensitivity and noticeably better in available headroom than the "standard" ferrics—which justifies the generally higher prices.

### Fuji FX

Fuji's "Pure-Ferrix" spearheaded this company's recent introduction of its tape to the American market. (Fuji also makes the less expensive FL ferric in addition to the FC chrome reported on below.) All the data represent excellent performance, very close to that of other tapes in this group, though treble headroom and noise are both slightly higher than average. Price: \$7.05; also sold in C-46, C-60.

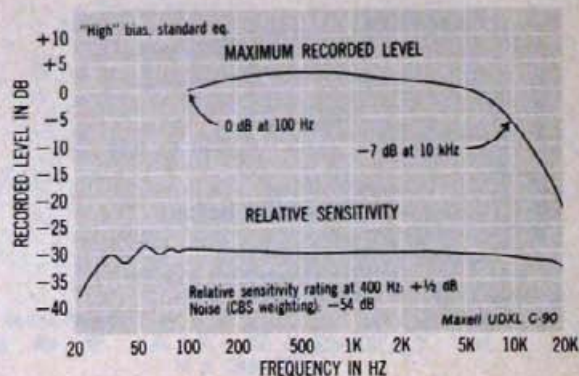
CIRCLE 145 ON READER-SERVICE CARD



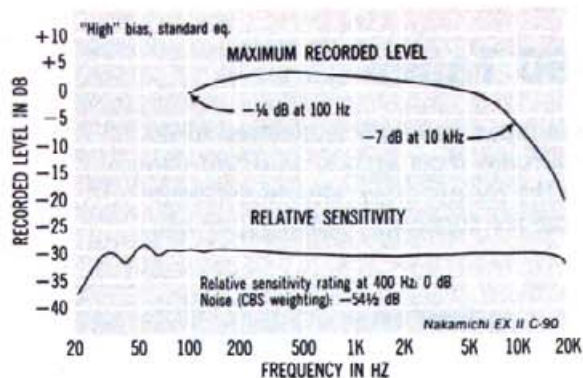
### Maxell UDXL

Maxell is the company that originally established the bias point (15% above "standard"), with its UD, for the "hot" group. The newer UDXL proves to be an excellent tape in every respect, though there is a slight drop in sensitivity at the extreme top in our sample. The midrange headroom is particularly fine. Price: \$6.50; also sold in C-60.

CIRCLE 146 ON READER-SERVICE CARD



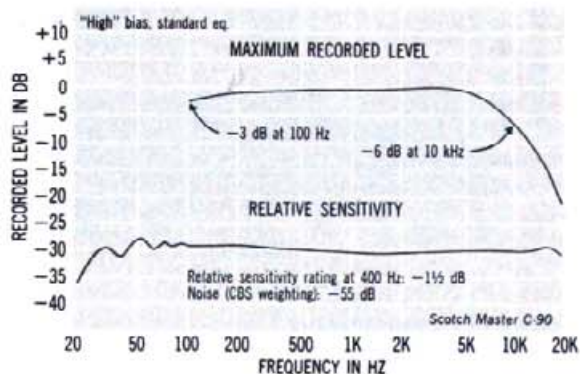




## Nakamichi EX II

This tape, in a sense, supersedes EX, just as its counterpart in the Maxell line, UDXL, supersedes UD. The similarity between the two newer tapes (or between the two older ones) is not surprising since they appear to come from the same production facilities. EX II is equally excellent. Price: \$5.80; also sold in C-60 (through Nakamichi equipment dealers only).

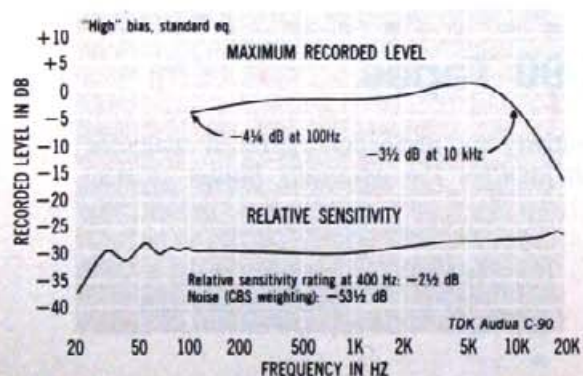
CIRCLE 147 ON READER-SERVICE CARD



## Scotch Master

The 3M entry in the "hot" ferric group displays the smoothest RS curve of any with our test setup but less midrange headroom than most (and less, even, than that of the best "standard" ferrics). Sensitivity is a little lower than average. So is noise. Price: \$3.59; also sold in C-45, C-60, C-120; in C-Box (C-60 and C-90 only), 50 cents extra.

CIRCLE 148 ON READER-SERVICE CARD



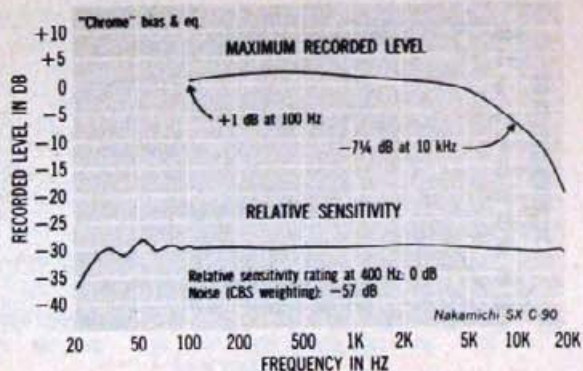
## TDK Audua

Audua proves to be the least typical of the tested "hot" ferrics. In the treble at around 5 kHz the headroom is excellent, but in the critical midrange area it is on the low side. Sensitivity, too, is the lowest in this group, noise is slightly higher than average. The RS curve shows a rising high-frequency characteristic, suggesting that the test setup may offer a little less bias current than is ideal for this tape. Price: \$3.99; also sold in C-60.

CIRCLE 149 ON READER-SERVICE CARD

## Chrome-Compatible Ferricobalt C-90 Tapes

The special ferric-based particle in these tapes delivers enough high-frequency headroom to allow chrome's 70-microsecond equalization (which "trades away" that headroom for lower noise), but with the better midrange headroom of ferrics.



## Nakamichi SX

Again, the extreme similarity between the Nakamichi tape and the comparable product from the same factory (TDK's SA) should cause no wonder. This is an excellent tape in every respect. Price: \$6.00; also sold in C-60 (through Nakamichi equipment dealers only).

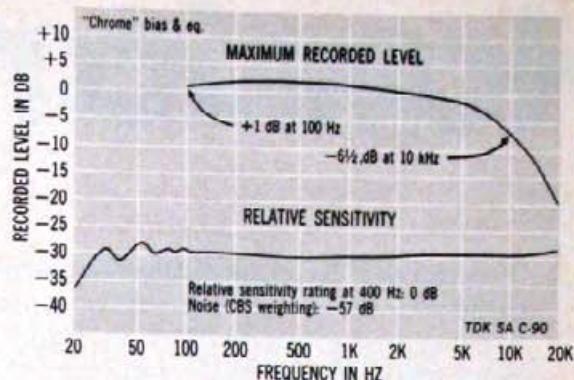
CIRCLE 150 ON READER-SERVICE CARD



## TDK SA

TDK—which developed the ferricobalt technology on which this tape is based—has produced a product that matches (or beats) chromium dioxide in its own performance turf without using chromium. Headroom is better than that of typical chromes, except possibly at the extreme top. Since the test setup was biased essentially for ferricobalt but produced very flat output with the tested chromes as well, they do appear to be completely compatible in this respect. Output of SA is, however, about 2 dB higher than that of typical chromes. Price: \$4.79; also sold in C-60.

CIRCLE 151 ON READER-SERVICE CARD



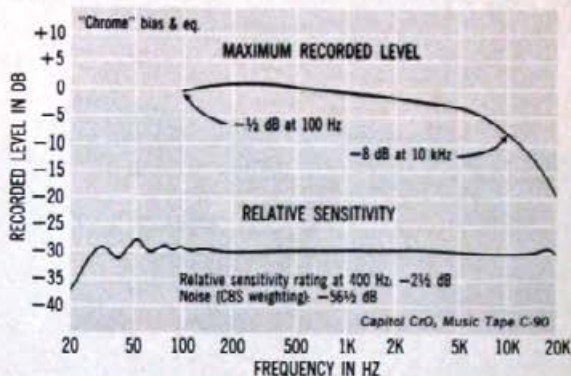
## Chromium Dioxide C-90 Tapes

Chrome offers inherently great high-frequency resolution in terms of both response and headroom, but most of that headroom advantage is used to accommodate the 70-microsecond chrome equalization, which noticeably reduces audible noise; midrange headroom generally is not as good as that of ferrics.

### Capitol (CrO<sub>2</sub>) Music Tape

Capitol's recent entry into chrome tape has produced a formulation that—in headroom (the MRL curve), response (the RS curve), and output (the sensitivity figure)—is typical of chromes we have tested. Noise is higher by a hair than that of other chromes in this group. Price: \$4.49; also sold in C-60.

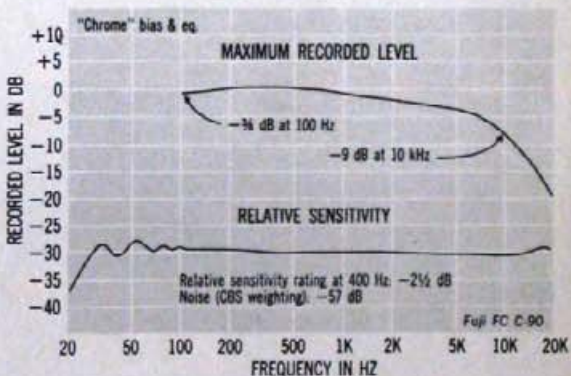
CIRCLE 152 ON READER-SERVICE CARD



### Fuji FC

Fuji's chromium dioxide (which has received less attention than its FX "hot" ferric tape) is typical of chromes in every respect. Price: \$7.05; also sold in C-60.

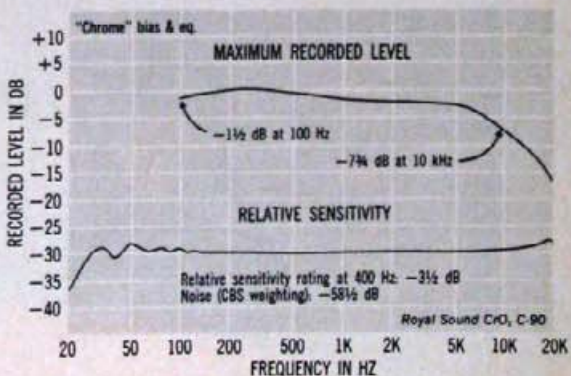
CIRCLE 153 ON READER-SERVICE CARD



### Royal Sound CrO<sub>2</sub>

The RS curve of this recent (and relatively inexpensive) addition to the chrome lists is excellent. Headroom, as represented on the MRL curve, is not as good as that of most chromes; but noise is the lowest measured in the present tests. Sensitivity is a trifle lower than that of typical chromes. Price: \$4.49; also sold in C-60.

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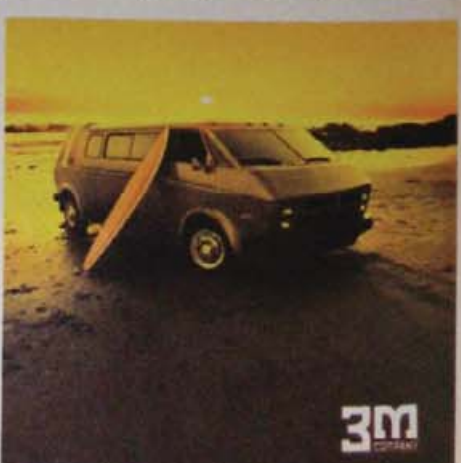
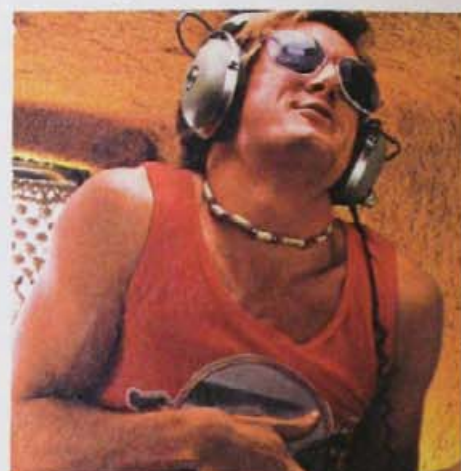
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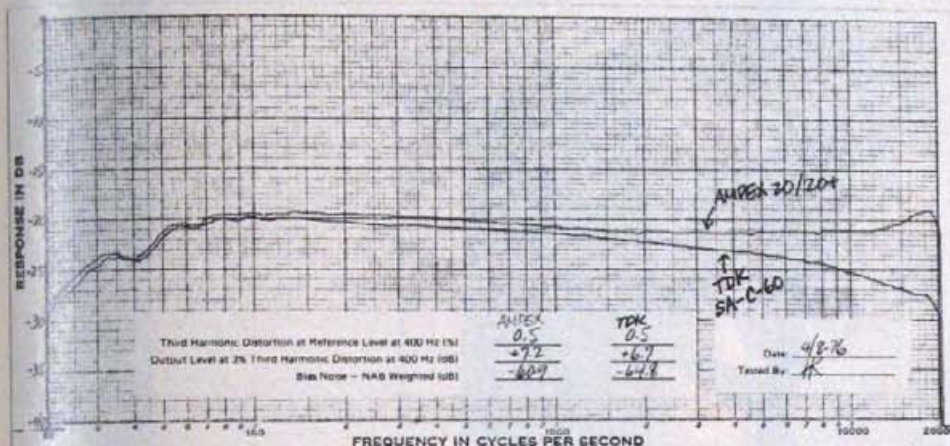
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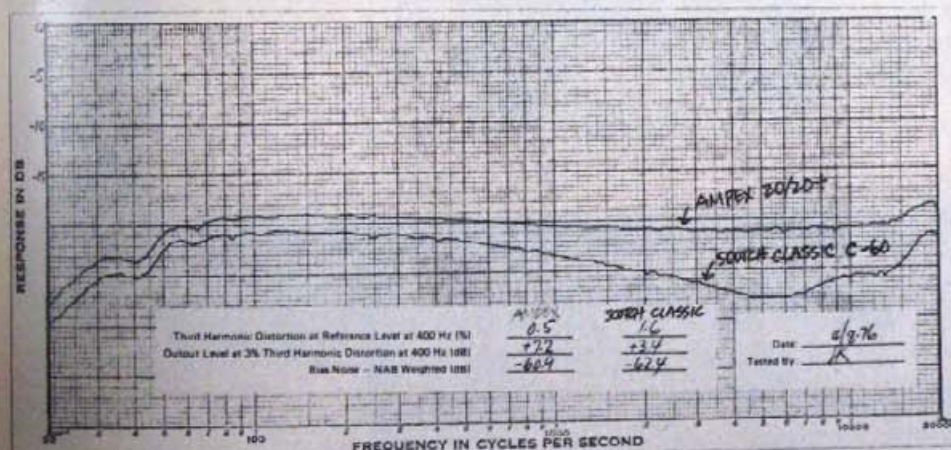


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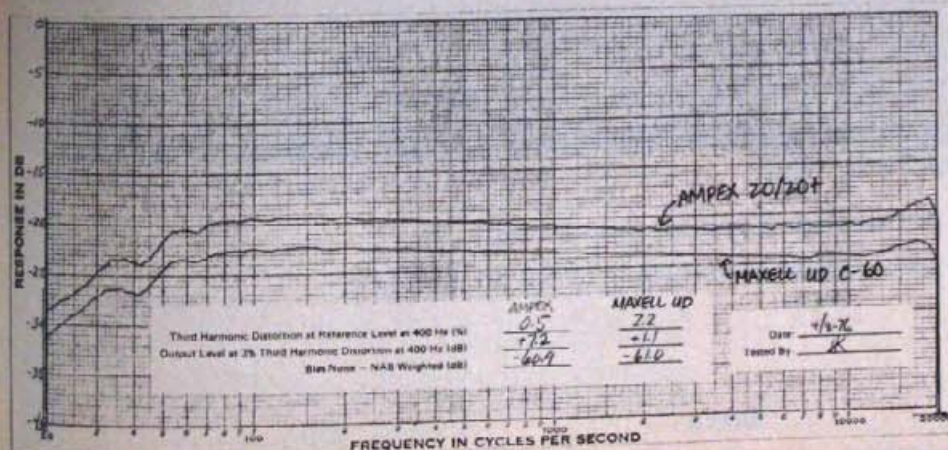
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**THE WINNER: AMPEX.**



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**THE WINNER: AMPEX.**



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**THE WINNER: AMPEX.**

CIRCLE 3 ON READER-SERVICE CARD

Play-offs were held April 8, 1976 in the Ampex Magnetic Tape Research Laboratory at Redwood City, California, using a Nakamichi-1000 cassette deck at standard factory bias setting and following each tape manufacturer's play-back instructions. We measured frequency response at a record level 20 dB below 200 nwb/m, third harmonic distortion at zero dB (200 nwb/m, 400 Hz), output at 3% third harmonic distortion (400 Hz), and N.A.B. weighted noise. C60 cassettes were used. The photos are unretouched chart recorder output. You can see why Ampex 20/20+ is the best quality cassette you can buy.

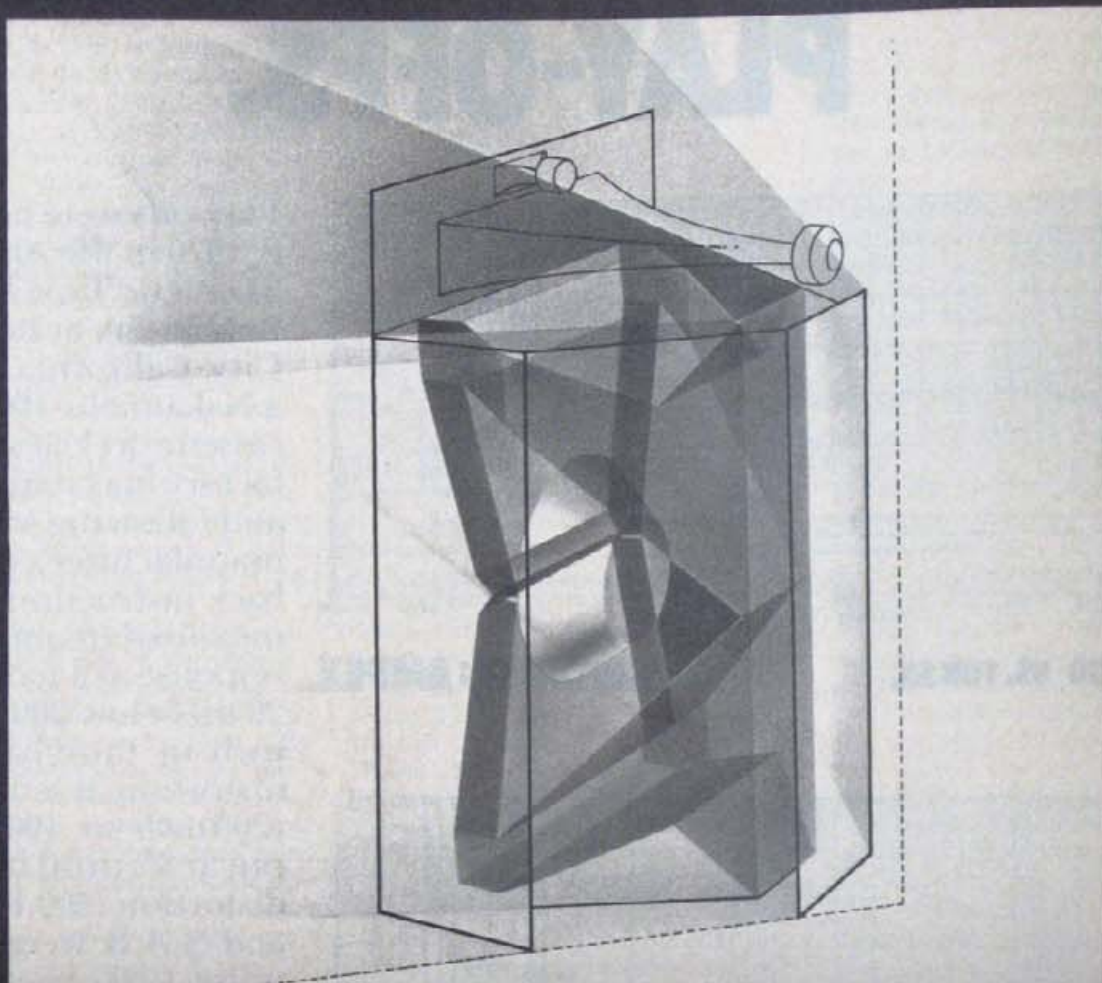


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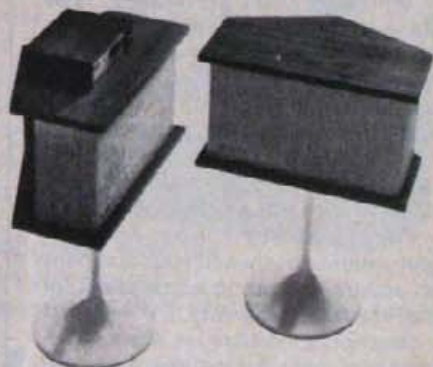
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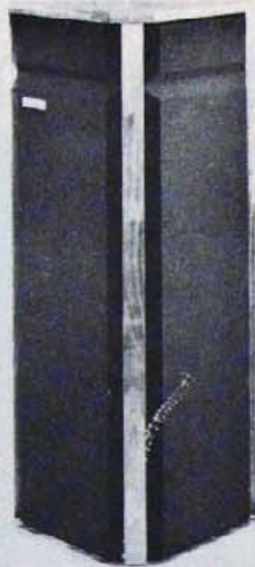


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## Press comment:



HIGH FIDELITY

April 1976

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CIRCLE 2 ON READER-SERVICE CARD

impact that was such a revelation in Haitink's recording. (Bernstein too achieved this effect in his otherwise erratic version. Columbia M 30828.) Barenboim is a bit more impressive in the staccato articulation of the first four horns at letter B, but Haitink has crisper pizzicatos at the beginning and provides a beautiful contrast with a bracingly vigorous trio.

Elsewhere, Barenboim fluctuates between drawing stylish and virtuosic playing from the Chicagoans and allowing some whiny violin portamentos in the first movement and some needless rhetoric (e.g., the premature ritard before the fermata at letter K in the finale). While the closing Adagio has some grand moments (the mighty brass fanfares first presented at letter A), the big lyrical tune that begins at letter C flows less smoothly and clearly than in the Amsterdam version.

Nonetheless, this handsomely engineered rendition has considerable virtues and surpasses many of those on record. Not, however, my top choices: Haitink, for the qualities already mentioned and many more, and Mehta, for the most successful account within a more conventional framework—monumental in the outer movements, brisker and lighter in the scherzo. Though dating back more than a decade, the Decca/London engineering is fully equal to DG's in detail, warmth, and massiveness of sonority, and the Vienna Philharmonic played its collective heart out for Mehta. A.C.

**BUCHT:** *Hund skenar glad\**; *Dramma per musica*; Symphony No. 7†. Dorothy Dorow, soprano\*; Swedish Radio Women's Chorus\*; Swedish Radio Symphony Orchestra, Stig Westerberg, cond.\*†; Norrköping Symphony Orchestra, SON, Okko Kamu, cond.\*. (Hakan Elmquist, prod.) CAPRICE CAP 1076, \$7.98 (distributed by HNH Distributors).

The music of Swedish composer Gunnar Bucht (born 1927), as heard on this disc, is of the variety that unfortunately is heard very rarely in concert halls. Not conservative enough to please the masses nor avant-garde enough to appease the cultists, Bucht's music is nonetheless capable of making a deep impression on the open-minded listener both for its craftsmanship and for the richness of its dramatic content. It belongs, in fact, to a broad category I characterize as "expressionistic" because of the way in which musical realities appear colored by a dark, deeply personal inner vision. Note, for instance, the nightmare march in the Seventh Symphony's second movement, or the icy, otherworldly woodwind-harp duets that form the first movement's second theme.

In both the Seventh Symphony (1970-71) and *Dramma per musica* (1966), incidental music composed for Ibsen's *The Pretenders*, Bucht's orientation remains quite serious, in spite of the rather droll French titles (*Malgré tout* and *Tant mieux*) given to the symphony's two movements. Moods recalling Berg and Ernst Toch prevail, with hints of later Sibelius in the way hollow instrumental solos grow out of gloomy orchestral miasmas. In the short 1961 chamber cantata *Hund skenar glad* (*Dog Runs Happy*), on the other hand, Bucht occasionally creates

some strikingly humorous effects in the vocal writing, shared by a solo soprano and a women's chorus. And although the vocal lines, with their wide, no-longer-quite-so-unexpected leaps, follow patterns that by now thoroughly pervade modern music, Bucht has woven the Gunnar Björling texts, both sung and spoken, around a steely yet transparent instrumental scoring in a manner that is quite compelling.

The performances and sound on this Swedish import do this richly original music full justice. I especially liked the dynamism and precision in Okko Kamu's interpretation of the Seventh Symphony and Dorothy Dorow's lightness of approach and perfect accuracy in the difficult *Hund skenar glad* songs. Strongly recommended.

R.S.B.

### DONIZETTI: Maria Stuarda.

Maria Stuarda  
Elisabetta  
Anna  
Leicester  
Talbo  
Cecil

Joan Sutherland (s)  
Huguette Tourangeau (ms)  
Margreta Elkins (ms)  
Luciano Pavarotti (t)  
Roger Soyer (bs-b)  
James Morris (bs)

Chorus and Orchestra of the Teatro Comunale, Bologna, Richard Bonyngue, cond. [Michael Woolcock, prod.] LONDON OSA 13117, \$20.94 (three discs, automatic sequence).

#### Comparison:

Sills, Farrell, Burrows, Ceccato

ABC ATS 20010/3

While fine Donizetti operas like *Belisario*, *Poliuto*, and *Pia de' Tolomei* remain unrecorded (except on the pirate labels), the duplication of *Maria Stuarda*, as of *Anna Bolena*, can perhaps be gently regretted. On the other hand, since four of the world's leading ladies—Baker, Caballé, Sills, and Sutherland—have all taken up the leading role, some record rivalry was perhaps inevitable. (And it might even be argued that what we really need is yet a third version, made by the best cast of all—which in my experience has been Caballé, Verrett, and Carreras.) *Maria Stuarda* has been much performed during the last decade; detailed annals up to 1973 appear in the first (1974) issue of *Donizetti Society Journal*. In New York, Queen Mary and Queen Elizabeth are both sopranos; in London, Mary is a mezzo and Elizabeth a soprano; elsewhere, vice versa. Moreover, different music is heard. Let me, with some inevitable simplification, explain, since neither the ABC nor the London album notes make things altogether clear.

Roughly speaking, there are four performing editions of *Maria Stuarda* going the rounds:

1) The "Bergamo" edition, launched at the first modern revival of the opera (Bergamo, 1958). This is based on an 1865 copy-score in Naples, its orchestration amplified by some unknown hand, then snipped and snicked and altered by a modern editor. Caballé uses it.

2) The "St. Pancras" edition, by Jeremy Commons and Gerald Gaver, launched at the 1966 St. Pancras (London) Festival. This corresponds to the printed vocal scores and the 1865 orchestration. It is used for the ABC recording, plus the overture from (3) below.

2a) A variant of (2) prepared especially for Dame Janet and the English National Opera. All Mary's music except the *Dialogo*



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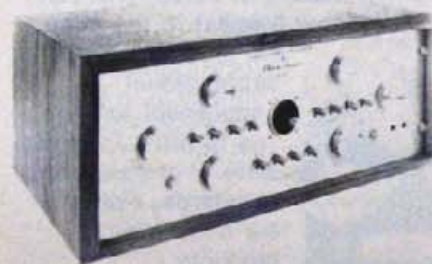
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CIRCLE 25 ON READER-SERVICE CARD

delle due regine and the sextet is lowered—the *confessione* by a tone, the rest by a semitone; Charles Mackerras has thinned the orchestration. In addition, Leicester's cavatina and his solo strophe in the duet with Elizabeth are down a semitone.

3) The "Opera Viva" edition, Patric Schmid's reconstruction of the opera, with added overture, as Donizetti himself revised it for Malibran, at La Scala in 1835. To show off Malibran's flashy technique, Mary's line goes both higher and lower than in other versions. Joan Sutherland used elements of this version in San Francisco in 1971 and more of it in Philadelphia and Hartford in 1974. This Malibran version is evidently the basis for the current London recording, but there is no overture.

There are many differences between the two recorded sets. For ABC, Eileen Farrell is a commanding Elizabeth, taxed by the virtuoso writing but always powerful and incisive. For London, Huguette Tourangeau makes an Elizabeth not merely mezzo, but positively contralto, who spends a lot of her time below middle C. Her cavatina and its cabaletta are both down a semitone, in F sharp (the passage between them is at printed pitch); she closes the cavatina on the low F sharp. Her vocal line has had most of the high notes written out of it; and in recitative she often takes phrases down an octave. (It sounds as if a baritone has entered Fotheringhay park, in Act II.) There are both dignity and emotion in her performance, which is ably sung. But there is nothing memorable about it. Farrell, Pauline Tinsley, Marisa Galvany, and, above all, Shirley Verrett have been far more striking.

Neither Sills nor Sutherland (nor, for different reasons again, Baker) seems to me quite right as the heroine. Sills has passion and a vivid way with the words, but not the weight of firm tone that is needed for the dramatic outbursts or the flow of limpid, beautiful tone called for by the final scenes. Sutherland has more weight and force of tone, more feeling for words than she used to, but a less energetic rhythmic command of the phrases. In long lyrical lines the timbre is apt to be cloudy. Moreover there are some moments where the voice is not altogether steady, or not exactly in tune; it is no longer quite the precision instrument it used to be. Sutherland begins the famous outburst in the *dialogo*—

Impure daughter of Boleyn . . .  
Obscene, unworthy harlot,  
The English throne is profaned,  
O vile bastard, by your foot!—

an octave higher than in the printed score. (Is this the Malibran version?) It spoils the climb of the furious passage. The main subject of the *dialogo* is at both appearances so extensively rewritten—Tourangeau plunging down, Sutherland shooting up—that Donizetti's original melody is not heard at all. The final *aria del supplizio* also appears in a much altered and I think less beautiful version.

Leicester brings us the "new" Pavarotti, a tenor of harder, tenser timbre than the limpid, lyrical Pavarotti who first won our hearts. It is rather as if a Gigli were trying to become a Caruso (or a Pavarotti a Domingo?). He is, however, very good—stronger than ABC's Stuart Burrows, if sometimes less graceful. James Morris is so

good as Cecil that one wishes he had been entrusted with the larger role, Talbot. (Both are *basso cantante* parts, compassable by basses or baritones.) Roger Soyer is a satisfactory but not exceptional Talbot. Leicester's cabaletta and the stretta of the *confessione* duet are reduced to single stanzas. There are some other small elisions.

The ABC performance, in general, is livelier and more dramatic—crisper orchestral playing, more verve in Aldo Ceccato's conducting, a more spirited chorus. Bonyne lays out the piece amply. His tempos are usually convincing, except in the *preghiera*, which is taken at an *andante comodo* too rapid for the full effect to be made. At times a sharper definition of the instrumental playing is needed—in Leicester's aria, for instance. The opera was recorded in the Teatro Comunale, Bologna, in a voice-favoring balance. The sound is natural. There is no "spotlighting" of detail. But I would prefer a slightly sharper focus.

*Maria Stuarda* as a whole, despite its present-day popularity, cannot, I think, be counted among Donizetti's very finest operas. In Act I, the working of an orchestral tag during Leicester's cavatina and the hints of a duet provided by Talbot's interjections are ingenious; so, in Act III, is the continuation of a duet as a trio (a nice, though not uncommon, stroke). Mary's entrance aria in Act II is attractive, if unmemorable; the sextet is a good piece; the *dialogo* can be powerful if the queens make it so. Rather late in the day, in the second scene of Act III, Donizetti's musical imagination takes fire, as the orchestra prepares for Mary's *confessione*. The rest is a long sequence for the heroine—*confessione*, *preghiera*, *aria del supplizio*, final cabaletta with a poignant major transformation of its theme—broken only by the carefully written *inno della morte* for the chorus, and it is all on a high level. If either ABC or London decides to issue a *Stuarda* "highlights" disc, I think it should consist simply of Sides 5 and 6, complete. A.P.

**DVOŘÁK:** Quartet for Strings, in G, Op. 106. Alban Berg Quartet. TELEFUNKEN 6.41933, \$6.98.

**DVOŘÁK:** Trio for Violin, Cello, and Piano, in E minor, Op. 90 (*Dumky*). **SMETANA:** Trio for Violin, Cello, and Piano, in G minor, Op. 15. Yuval Trio. [Franz-Christian Wulff, prod.] DEUTSCHE GRAMMOPHON 2530 594, \$7.98.

The G major Quartet, Op. 106, is not quite Dvořák's last, for it was composed (in 1895) just months before the A flat, Op. 105. But the G major, one of Dvořák's most intricate works in traditional form, has a quality of the culminating masterpiece in its genre, and I've long wondered why our big-league quartets so rarely program it. It has not fared well on disc, and the current catalogue lists only the versions by the Kohon Quartet (in Vox SVBX 550), energetic enough but foursquare and problematic in intonation, and the Prague Quartet (DG 2530 480), nervous, fussy, and tonally unfocused.

The Alban Berg Quartet, which has previously shown its mettle in recordings of Berg and Haydn, proves equally attuned to Dvořák, responding as successfully to the G major's darkly expressive ambience as to



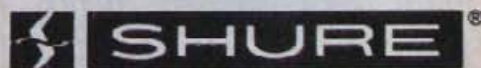


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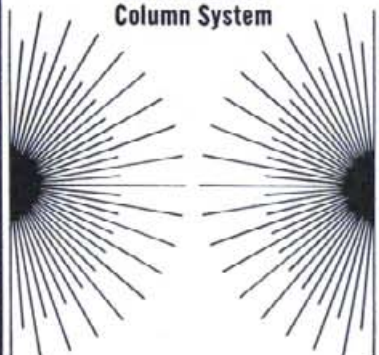
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Manuel de Falla  
*His Three-Cornered Hat*  
ballet electrically  
performed.



its Slavic zest and drive. The group has a thorough understanding of the work's formal proportions and plays with tonal solidity and rhythmic flexibility. If tempos are a bit on the leisurely side, the firm pointing of phrases keeps them from sounding stodgy. This is a recording I've been waiting for quite a while!

Dvořák's E minor Piano Trio is the last of its line in fact as well as spirit, and it has fortunately had less trouble than the G major Quartet reaching audiences, who delight in the sublime beauty of the slow-fast folk ballads that give the work its title, *Dumky*, and in the composer's masterly fitting of lines to the most seductive qualities of each instrument. This is a work so filled with love of all that is alive that I can never bear its coming to an end. If Smetana's only piano trio is not quite so miraculous a work, it too is a deeply sincere and personal utterance. Inspired by the death of the composer's daughter, it seethes with tragedy and anger, though somewhat meanderingly. If less strongly crafted than the Dvořák, it certainly makes a logical coupling.

The Yuval Trio has plenty of competition in the *Dumky*. I'm enormously fond of the pure and soaring Heifetz/Piatigorsky/Lateiner rendition (RCA LSC 3068), the immaculately polished and vibrantly dramatic work of the Beaux Arts (Philips 802 918), and the deeply spiritual kinship with the music displayed by the Suk Trio (a late-Fifties DG disc never released here). The Yuval players are good instrumentalists but not quite in that category, and in the Smetana too the Beaux Arts (Philips 6500 133) manages greater subtlety and tautness of line. On the positive side, the Yuval's tempo relationships in the *Dumky* seem to me more correct than those of the three versions cited. And the Yuval version, offering two major works on one disc, makes a good practical choice, whatever its faults. A.C.

**ELGAR:** *Enigma Variations*—See Brahms: *Variations on a Theme by Haydn*.

**FALLA:** *The Three-Cornered Hat* (complete ballet)\*; *Concerto for Harpsichord and Five Instruments*†, Jan DeGaetani, mezzo-

soprano\*; Igor Kipnis, harpsichord†; New York Philharmonic, Pierre Boulez, cond. [Andrew Kazdin, prod.] COLUMBIA M 33970, \$6.98. Tape: ●● MT 33970, \$7.98. Quadriphonic: MQ 33970 (SQ-encoded disc), \$7.98.

In the nearly twenty years since the death of Manuel de Falla, his music seems to be losing rather than gaining favor. With the exception of Alicia de Larrocha's efforts on behalf of the piano works, recording activity has slackened considerably. Indeed, the present complete *Three-Cornered Hat* ballet is the first in a decade. It well may be enough in itself, however, to turn the tide, for in this electrically vibrant performance (with the most hauntingly evocative singing to date of the brief vocal interludes) and in Columbia's kaleidoscopically glittering recording (scintillant in stereo only, incandescent in SQ-decoded quadriphony) the work's superb coloristic and balletic qualities are realized well-nigh ideally.

It's good to hear this music in its entirety rather than the usual Act II three-dance excerpts only (less than one-third of the full score) or even with the addition of an Act I suite (as in the Bernstein/Columbia version of 1966), which adds less than another third. Some of the score's finest moments are the arresting opening with its fierce shouts and machine-gun castanets, the two vocal interludes, and some fascinatingly depictive scene-settings—the latter invaluable for their mood-contrasts with the motoric drive of the dances themselves. Boulez makes the most of both elements: unexpectedly sensuous in the more pictorial and poetic passages, even crisper and higher in voltage than expected in the dynamic ones. Quite apart from the advantage of more vivid stereo technology, to say nothing of the still more spellbinding attractions of quadriphony, this version finally eclipses the memorable one by Ansermet (with Berganza), which for me had been unchallenged since 1961.

The neoclassical harpsichord concerto, commissioned in 1926 by Landowska and once recorded in the 78-rpm era by the composer himself, is uncharacteristically acerbic music for Falla. It has never been too well received by the general public, but the ingenuity of its more-concertante-than-



concerto scoring (for harpsichord with a collaborating rather than accompanying ensemble of flute, oboe, clarinet, violin, and cello) has consistently fascinated musicians. That probably accounts for the relative frequency with which it has been recorded—and the briefness of these recordings' in-print life. Witness the recent withdrawal of the fine 1972 Puyana/Mackerras version for Philips. I don't have that at hand for comparisons, and I haven't yet heard (or read any review of) the late-1975 Galling version for Turnabout, but I doubt that either one can surpass the incisive yet saucy wit of the performance by Igor Kipnis and five Philharmonic first-desk men, much less compete with its ultravivid stereo or almost oppressively "present" quadraphonic recording. R.D.D.

**HAYDN:** Quartets for Strings: in D, Op. 64, No. 5 (*Lark*); in D minor, Op. 76, No. 2 (*Quinten*). Cleveland Quartet. [Max Wilcox, prod.] RCA RED SEAL ARL 1-1409, \$6.98.

Haydn's Op. 64, No. 5, is called the *Lark* Quartet because of its mood of vernal charm and because the very opening—a magnificent burst of song—might well recall the lark's warbling on a quiet summer morning. The three lower instruments preludize for a few measures; then suddenly up high the first violin soars forth with a beguiling melody. The Adagio also sings fervently, and after its dark middle section the fervor is renewed in the radiant major key. The minuet is hearty, peasant-like, while the finale is a tumbling perpetuum mobile, its headless rush enhanced by the interspersed of a cloudy little episode in D minor.

Op. 76, No. 2, has also acquired a nickname, but this dark and introspective masterpiece could not be tied to a pleasant resemblance, so it was named (*Quinten*) for the extraordinarily terse motif upon which the first movement is based: two downward steps in fifths. Haydn is at the summit of his creative powers here. With inexhaustible imagination, and with the "entirely new style" (his own words) that he created, he merges polyphony with homophony, elaborating his laconic subject in ever new configurations. Amazingly, by hewing closely to this basic motif, his fancy gains the optimum of freedom; to think that there still are people who see in the classic sonata form something "strict"! The lovely Andante deploys its main body over a dreamy theme that clearly shows Mozart's influence on the aging master. But this felicity is roughly terminated by a minuet unique in the quartet literature: a two-voiced canon between two pairs of instruments playing in octaves. (This ghostly tour de force was dubbed "Witches' Minuet.") The robust finale has a decidedly Slavic hue.

These two quartets demand the ultimate in ensemble technique and interpretive unanimity, which the Cleveland Quartet supplies in good measure; only the opening of the D minor Quartet is a little rough. To be sure, this is not a gentle beginning and calls for vigor, but the Clevelanders press a bit too hard. Also, the first violinist, though like his colleagues technically impeccable, has a somewhat thin tone in the high region;

the "lark's" song is not warm enough, and repeatedly there is a soupcon of sliding. On the whole, however, this is a very creditable performance, and the sound is good.

P.H.L.

**HAYDN, M.:** Symphony in G—See Mozart: Cassation, K. 62a.

**JANÁČEK:** Sonata for Violin and Piano—See Prokofiev: Sonata No. 1.

**B** **MOZART:** Cassation (Serenade No. 1), in D, K. 62a (with March in D, K. 62). **J. C. BACH:** Sinfonia in C minor, Op. 6, No. 6. **M. HAYDN:** Symphony in G (with introduction by Mozart, K. 444). St. Paul Chamber Orchestra, Dennis Russell Davies, cond. [Marc J. Aubert and Joanna Nickrenz, prod.] NONESUCH H 71323, \$3.96.

I missed the earlier releases of contemporary music for CRI by the Minnesotans and their conductor since 1972, the Juilliard-trained Davies, so their Nonesuch debut all the more pleasantly alerted me to the possibility that we may have here potential American competition for Neville Martin's Academy of St. Martin-in-the-Fields in England. Of course, neither the twenty-four-member St. Paul ensemble (augmented by five players for the present program) nor the thirty-two-year-old Davies as yet commands the flexible versatility, stylistic polish, or powers of personality projection of the esteemed British players and conductor. But their performances are distinguished by admirable crispness, buoyancy, and straightforwardness, particularly praiseworthy for the avoidance of the usual pitfalls of present-day interpreters of eighteenth-century music: anachronistic "expressiveness," heavy-handedness, and overemphasis. Moreover, they are immaculately recorded in the most diaphanous of sonic textures.

This release is probably even more newsworthy for a program that couples the fourteen-year-old Mozart's precocious first venture into the *Final-Musik* (cassation/serenade) genre with "his" so-called Symphony No. 37 (actually composed, except for the introduction, by his friend Michael Haydn) and a superb all-minor-key sinfonia by his early idol, Johann Christian Bach. These last two works are otherwise currently unavailable in American disc catalogues, although each represents an invaluable corrective for the generally lukewarm esteem in which its composer is held nowadays. Listening to the symphony—the heart-twisting slow movement in particular—it's easy to understand why Mozart wanted to copy, augment, and perform it himself and why for so many years it was thought to be entirely his own work.

The eight-movement *Final-Musik* (properly prefaced by its related march) is called a Cassation here, as indeed it was by young Mozart, but it is the Köchel and Schwann catalogues' Serenade No. 1, currently represented only by a Boskovsky/London Stereo Treasury version released a little over a year ago in the U.S. The new version stands proudly on its own. Not the least of its merits are some fine quasi-concerto oboe and



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**MOZART:** Idomeneo: ballet music, K. 367; Les petits riens (ballet music), K. 299b. Netherlands Chamber Orchestra, David Zinman, cond. PHILIPS 6500 861, \$7.98.

Comparison—Les petits riens:  
Marriner/Acad. St. Martin

Ang. S 36869

Mozart composed his ballet music for *Idomeneo* in Munich during January 1781, after the completion of the rest of the opera and just a few days before the premiere. In this music we hear the master theater craftsman at work: The thematic material is a distinct cut above the ordinary for conventional operatic ballets of this period, and the orchestration makes full use of the generous resources at hand. Many pages are symphonic in character and force. Unfortunately we have no idea where in the work the Munich producer inserted this ballet; hence it stands apart with its own Köchel number, and modern theaters must decide for themselves how (or whether) to use it. A separate recording in a performance of this caliber has long been needed in the catalogue; the result reinforces the thesis that, no matter how much Mozart you know, there are always things worth discovering.

*Les petits riens* is another matter. Here the master craftsman, stuck in Paris in 1778, composed a sequence of dances to win the favor of the director of the Paris opera with the hope (which proved vain) that he could go home to Papa with a fat French commission as proof of his success. The ballet was played a few times and dropped, and Mozart's name was never even mentioned, a situation that makes at least a little better sense if we realize that seven of the twenty numbers were, as Wolfgang wrote home, "miserable old French airs." Zinman records the twelve numbers most commonly taken as Mozart's work. Neville Marriner and the Academy of St. Martin-in-the-Fields added a thirteenth, an Andante that rates inclusion in Köchel but may be spurious. There are other textual differences between the two recordings—none of them, in my estimation, particularly grave.

If you have the Marriner record and want the *Idomeneo* music, the duplication of *Les petits riens* may be interesting. Zinman's performance is very cool, dashing, and gallant, which is probably what the French would have preferred. Marriner gives you a touch of Vienna, more warmth, greater attention to niceties of nuance and phrasing, but without any loss of the essential verve of the score. This is ideal summer music.

R.C.M.

**PROKOFIEV:** Sonata for Violin and Piano, No. 1, in F minor, Op. 80. **JANÁČEK:** Sonata for Violin and Piano, Op. 21. David Oistrakh, violin; Frieda Bauer, piano. WESTMINSTER GOLD WGM 8292, \$3.49.

**PROKOFIEV:** Sonata for Violin and Piano, No. 1, in F minor, Op. 80. **BRAHMS:** Sonata for Violin and Piano, No. 2, in A, Op. 100. David Oistrakh, violin; Sviatoslav Richter, piano. [Igor Vepintsev, prod.] MELODIYA/AN-

GEL SR 40268, \$6.98 [recorded in concert, March 19, 1972].

The late David Oistrakh's close association with the Prokofiev F minor Sonata, a work of stark power and numbing lyricism, dated back to the 1946 premiere. These are presumably his last two recordings of the work, and both are distinguished. They are in fact sufficiently different that—especially given the different couplings and the Westminster budget price—my impulse would be to acquire both.

The harder, more objective Oistrakh/Richter (a live performance) is a thrilling interpretation, particularly effective in the jabbing scherzo, but in the end its lack of repose gets to me. I am more moved by the Oistrakh/Bauer. The pacing is a bit broader and more reflective, the ambience more mystical and communicative, thanks to Bauer's more cushioned touch and the warmer, more immediate studio microphoning. Bauer, it should be stressed, is a great pianist, with a vibrant, velvety tone, glowing musical authority, fiery temperament, and tremendous technical ability. There is no lack of strength in the Oistrakh/Bauer collaboration, but it is tempered by a feeling of warm humanity.

The Oistrakh/Bauer coupling is Janáček's typically cryptic Op. 21 Sonata, and no previous recording has better captured its charged, febrile atmosphere. The Oistrakh/Richter Brahms A major Sonata is large-scaled and impressive. The performance reflects Richter's penchant for gearshifts and manic plasticity; for example, after a rather slow, aloof beginning, at the first climax the artists suddenly increase both tempo and intensity. With a basically cutting sonority and sharply defined rhythmic inflection, one might call the performance at the same time subjective and impersonal!

Oistrakh's tone on both discs may lack the silkiness and color of his best years, but the reproduction is generally kind to him and this is never less than marvelous violin playing. The Westminster Gold disc has been incorrectly assigned a WGM (i.e., mono) prefix and consequently banished to Schwann-2; this is true, and excellent, stereo. The more distant reproduction of the Melodiya/Angel live performances is incomparably better than that of the 1968 Oistrakh/Richter release of the Brahms D minor and Franck A major Sonatas: The piano has more range and color, the violin soars with less confinement. H.C.

**RAVEL:** Orchestral Works, Albums 4-5. Aldo Ciccolini, piano (in the concertos); Orchestre de Paris, Jean Martinon, cond. [René Chalan, prod.] ANGEL S 37150 and S 37151, \$6.98 each SQ-encoded disc. Tape: 4XS 37150 and 4XS 37151, \$7.98 each; 8XS 37150 and 8XS 37151, \$7.98 each.

**Album 4:** Le Tombeau de Couperin; Pavane pour une infante défunte; Alborada del gracioso; Menuet antique; Une Barque sur l'océan. **Album 5:** Concertos for Piano and Orchestra: in D (for the left hand); in G.

Like Pierre Boulez, the late Jean Martinon had a special talent for finding just the right blend and balance for the instrumental colors of a work. Unlike Boulez, however, Martinon usually concentrated less on ver-



tical structure and more on the flow of the music and its thematic lines, often creating a sense of unbroken continuity.

This approach works with good effect in the orchestral part of the Ravel G major Piano Concerto. The second movement's bluesy lyricism ripples with dreamlike fluidity from start to finish. Martinon, furthermore, delineates the simultaneous instrumental levels with such clarity that certain contrapuntal effects in the third movement are heard more distinctly in this version than in any other. A certain detachedness, both from pianist Aldo Ciccolini and from Martinon, also gives the concerto what I would consider a more Ravelian flavor than most interpretations. The first movement, as an example, is taken somewhat more slowly than usual, but what is lost in dynamism and *éclat* in this movement is gained by the aural delights provided by the crystalline contours taken on by the music.

In the shorter pieces as well, notably the *Menuet antique* and the *Alborada del gracioso*, Martinon is able to shape the instrumental textures with extraordinary sharpness while avoiding the heaviness that sometimes mars Boulez' excessive attention to this element. The four-movement *Tombeau de Couperin* also works at least as well as the numerous other versions on disc. On the other hand, the *Pavane*, *Une Barque sur l'océan*, and particularly the much more enigmatic left-hand concerto are flawed by an unpleasant coldness.

The sound (as heard in stereo) for both discs is rich but somewhat overly rever-

berant. And I must say that Angel's recent pressings have improved considerably. There does seem to be a problem, in stereo listening at least, with balance, perhaps because of a lack of true quad-stereo compatibility. In the G major Concerto especially, certain instruments tend to become swallowed up and disappear, while others, notably in the low midrange and bass, occasionally pop out in startling ways. The engineering for both piano concertos, in fact, turns the works into orchestral pieces with piano. And thus, although I was impressed by certain elements of Ciccolini's playing—his trills, for instance—the quality that struck me most was his lack of obtrusiveness, voluntary or otherwise. R.S.B.

**SCARLATTI, A.: Madrigals.** Hamburg Monteverdi Choir, Jurgen Jürgens, cond. [Andreas Holschneider and Werner Mayer, prod.] ARCHIV 2533 300, \$7.98.

*Sdegno la fiamma estinse; Intenerite voi, lacrime mie; O selce, o tigre, o ninfa; O morte, agl' altri fosca; Or che da te, mio bene; Mori, mi dici; Cor mio, deh non languire; Anzi un tempo.*

Though the "monodic revolution" was particularly opposed to the polyphonic madrigal of the Renaissance, and after c. 1620 the great madrigal literature seems to have succumbed to the instrumentally accompanied vocal genres, the true Italian madrigal did not die. On the contrary, it had a second flourishing far into the eighteenth century. Lotti, the elder Bononcini, Caldara, Stefani, and a number of other distinguished

composers bequeathed us quite a few, though little of this post-Renaissance resurgence of the madrigal has been explored and published. Archiv now enables us to get a glimpse into this unknown land, and the view is as enchanting as the realization of what we have been missing is saddening.

In his multifarious activity, Alessandro Scarlatti composed eight madrigals, which Archiv has recorded from manuscript sources preserved in Naples, Vienna, and London. This extraordinary connoisseur of the beauty and potentiality of the human voice, on whose wondrous melodies rests much of the music of the eighteenth century, transplanted shoots from the sixteenth century that took root and bloomed. Perhaps the madrigal was out of date by 1700-10 (or whenever these were composed; the date is uncertain), yet Scarlatti remained loyal to his own time, for while the imitative counterpoint in the five parts is smoothly continuous, recalling the great masters of yore, the harmonies are bold, the chromaticism advanced, and the mixture of old and new exquisite. He sets typical madrigal texts, which are both the dream's sunlit domes and its ice caves; I must quote at least one of them to show the spirit of this languorous art.

Disdain extinguished the flame which scorched me,  
Blunted the arrow which struck me,  
And untied the bonds which fettered me.  
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Nor wounds nor flames  
And pays no heed to lightning.

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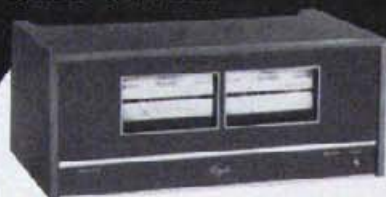
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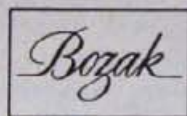
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Happy and free from love's torments,  
Thou canst be disdainful of the fire, the arrow, and the bonds.

The musical settings closely follow the texts, the intensity waxing and waning; the gentle sadness summons tears, and the ardor warms the heart. If we turn to visual comparisons (since when describing music we must always resort to metaphors), we think not of glittering jewels, but of finely chased and gleaming silver.

The performance is superlative. The Hamburg Monteverdi Choir under the expert and loving direction of Jürgen Jürgens sensitively interprets the shimmering musical translation of the texts. They understand the sensuous appeal of the languishing suspensions and the magic of beautiful choral sound. I can think of none of the inevitable reservations without which a review is hardly respectable; here good taste, consummate musicianship, and beautiful sound reign. If this recording does not deserve some grand prix, I don't know what would. P.H.L.

**SCHUBERT:** Quartets for Strings: No. 9, in G minor, D. 173; No. 13, in A minor, D. 804. Alban Berg Quartet. TELEFUNKEN 6.41882, \$6.98.

**Comparisons:**  
Melos Qt (Nos. 9, 13)  
Guarneri Qt (No. 13)  
Amadeus Qt (Nos. 9, 13)

In DG 2740 123  
RCA LSC 3285  
DG 139 194

A fascinating pair of Schubert performances, and ones that may stir controversy—not on the basis of skill (it is enormous!), but because of the extraordinarily silken, almost serpentine quality of the playing. No other versions of No. 9 or 13 in the catalogue approach the Berg Quartet in terms of fluidity, lyricism, elasticity of dynamics, and over-all velvety sheen of tone. This is, in fact, quartet-playing quite in a class by itself.

When taken side by side with competing performances, the Berg is so arresting that

it tends to overshadow them all. With No. 13, for example, the Melos is by comparison simply stodgy, the Guarneri off and dreaming—slow-paced, syrup-drenched, and (I hesitate to say it) coarse-toned. The Amadeus stands up best, urgent and tight-rhythmed—quite a bit tighter and more highly accented, in fact, than the Berg. Yet there is a liteness and elegance in the Berg that is unmatched anywhere. It is this very elegance that, after a bit, makes one begin to wonder if the Schubertian muscle isn't being a little underplayed. The Minuet of No. 9 could do with a bit of the bump-tiousness that both the Melos and the Amadeus give it. The finale of No. 13 is carefully rendered by the Berg so that the accented quarter notes are very much part of the fabric, not too abrupt, not too unsettling; the Amadeus bites into those accents with an overt vigor.

Each makes its point. Schubert in the Berg's hands is subtle, highly nuanced, beautifully articulate, always singing. It is an experience that will stand out amidst hours of listening to assorted other groups. Don't miss it. S.F.

**SMETANA:** Trio for Violin, Cello, and Piano—See Dvorák: Quartet for Strings, Op. 106.

**STRAUSS, J.:** Waltzes. Boston Pops Orchestra, Arthur Fiedler, cond. [Raymond Few, prod.] LONDON PHASE-4 SPC 21144, \$6.98. Tape: SP5 21144, \$7.98.

An der schönen, blauen Donau, Op. 314; Geschichten aus dem Wienerwald, Op. 325; Frühlingsstimmen, Op. 410; Künstlerleben, Op. 316; Rosen aus dem Süden, Op. 388.

Fiedler long has been the pre-eminent (if not only) American conductor with a sure command of authentic Viennese dance-music idioms and the one who, more than any other, has introduced American listeners to quite a few of the unfamiliar Strauss-family works. So Straussians are likely to be somewhat disappointed to find that his first new Strauss record in many years (his sec-



and release under London's Phase-4 rubric) is confined to warhorses. But any such disappointment will last only until they start listening.

As I write, Fiedler at eighty-one is just beginning his forty-sixth Boston Pops season, but he has never sounded more magisterially authoritative or more infectiously zestful and never has had his sometimes overexuberant energies under firmer control than he does here. And seldom has the Pops orchestra been recorded with as big and rich sonority or as vivid presence in as authentic a big-hall ambience. This is of course not the only way to play Strauss waltzes; smaller-scaled ensemble performances, such as the Strausses themselves usually gave, still have—when done in proper Viennese tradition—a uniquely charming intimacy. But the present works are such substantial masterpieces of symphonic scoring that their full breadth, coloristic wealth, and powers of rhythmic and melodic intoxication can be realized only by a first-rate big orchestra in performances where every scoring detail and direction is observed as scrupulously as Fiedler does here, yet in which there is never a hint of nervous or even cautious painstaking.

I won't claim that this waltz program crowns a career, for I have no doubt that there will be more, no less elegant triumphs to come from Fiedler, but this certainly is the best Strauss-waltz record ever made in this country and one of the best made anywhere. Although all five works (including the *Artist's Life*, with its too-often abbreviated coda) are played without cuts, most of the score-specified repeats are not observed—a minor but nevertheless regrettable blemish on an otherwise matchless achievement. R.D.D.

**STRAUSS, R.:** Also sprach Zarathustra, Op. 30\*; Till Eulenspiegel, Op. 28; Don Juan, Op. 20\*. Samuel Magad, violin\*; Chicago Symphony Orchestra, Georg Solti, cond. [Ray Minshall and David Harvey\*, prod.] LONDON CS 6978, \$6.98 [from CS 6800, 1974]. Tape: CS 6978, \$7.95.

Comparison—Zarathustra:  
Haitink/Concertgebouw

Phil. 6500 624

It would be unfortunate if the gargantuan quantitative appeal of this Straussian cornucopia should be allowed to overshadow its qualitative significance. Yet one's first reaction is to be bowled over by the sheer amount of wide-range symphonic music—sixty-three minutes—that has been captured, without apparent crowding or inner-groove distortion, within the confines of a single disc. Apart from the economic advantage, this allows us to hear *Zarathustra* without a side break.

Musically, this release provides distinctively individual, unexpectedly romantic interpretations, with the Chicagoans at their Solti-led best, recorded in magnificently vivid yet warmly glowing sonics—especially the 1975 Medina Temple *Zarathustra* and *Till*. This *Till*, indeed, gives us conductor and orchestra at their Straussian finest. I can't think of any previous recorded version that better captures both the haunting folktale pathos and exuberant horseplay humor of this music.

I rank Solti's *Don Juan* (recorded a shade less sumptuously in 1973 at the Krennert Center, previously issued in the "Solti Chicago Showcase" collection) and his *Also sprach Zarathustra* close to, but just below, the best recorded editions. Both are magnificently ardent and infectiously high spirited, but both are perhaps too romantically expressive at times and certainly too episodic. *Zarathustra* is exceptionally and refreshingly individual, however, and at 30:30 (just a bit slower than the fastest-of-all Steinberg/DG version) it is unusually vivacious. But it doesn't challenge the famous Reiner/RCA reading for somber drama nor my favorite Haitink/Philips version for magisterial eloquence. Nevertheless, Solti's

fervency is mightily invigorating and the London sonics blaze incandescently, except for the engineers' or producer's odd—if perhaps not entirely unreasonable—decision to minimize the midnight chimes in the final climax.

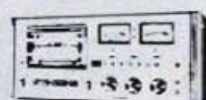
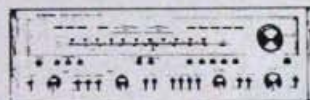
The tape edition, included in London's first imported batch of British-processed Dolby-B musicassettes, is also a delight both to one's ears and musical sensibilities. But in direct A/B comparisons the cassette's high end is just a shade less brilliant than the disc's—a mellowing that some non-audiophiles may prefer but that isn't characteristic of the truly spectacular sonic qualities heard in the Herrmann "Mysterious Film World," the Mehta Schehera-

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R.D.D.

**STRAUSS, R.: Don Quixote, Op. 35.** Ulrich Koch, viola; Mstislav Rostropovich, cello; Berlin Philharmonic Orchestra, Herbert von Karajan, cond. [Michel Glotz, prod.] ANGEL S 37057, \$6.98 (SQ-encoded disc).

Comparison:  
Fournier, Szell/Cleveland

Odys. Y 32224

Rostropovich is so temperamentally and technically suited for the protagonist's role in what well may be the most imaginative—dramatically as well as sonically—of all the Richard Strauss tone poems that it's hard to believe he hasn't recorded it long before now. I can't trace any version, though there

may have been one made in Russia sometime. In any case, there will be a lively welcome for his present characteristically rhapsodic performance, one ably supported by a properly less flamboyant Sancho Panza violist, by the virtuoso Berlin Philharmonic players, and by a conductor who seems much more personally involved than when he last conducted, far too blandly, a *Don Quixote* with Fournier a full decade ago. Add EMI engineer Wolfgang Güllich's robust, lucidly detailed, yet glowingly warm recording, and this must rank as an outstanding version. (That's in stereo. In SQ-decoded playback, there is the usual expanded ambience but far less markedly quadraphonic effect than one might expect, or indeed almost demand, in music as dramatic as this.)

And yet, when I go back to my favorite, the 1961 Epic (now Odyssey) recording, I find once again—regardless of any technological aging, regardless of Rostropovich's more extraverted characterization of the Don himself—that the Fournier/Szell masterpiece remains incomparably compassionate, eloquent, and profoundly moving.

R.D.D.

**STRAVINSKY: L'Histoire du soldat (complete; in English).**

Narrator  
The Soldier  
The Devil

John Gielgud  
Tom Courtenay  
Ron Moody

Boston Symphony Chamber Players.  
[Thomas W. Mowrey (music) and Franz-Christian Wulff (text), prod.] DEUTSCHE GRAMMOPHON 2530 609, \$7.98.

Schwann lists only one other recording of *L'Histoire* complete with text: Stokowski's Vanguard double recording—once in Ramuz' original French, once in English (though French-accented English). This new recording, with a new English translation by Michael Flanders and Kitty Black, is veddy, veddy British indeed, but the voices are neatly differentiated and characterized, and the recording of the instruments is superb. The conductorless Boston players provide as brisk and unsentimental an interpretation as Stravinsky could have demanded in his shrillest interview with Robert Craft, but at times this approach leads to a matter-of-fact style of playing that dulls the irony of the music.

A.F.

**VIVALDI: Vocal Works.** For an essay review, see page 77.

## Recitals and Miscellany

**RONALD BARRON: Le Trombone Français.** Ronald Barron, trombone; Fredrik Wanger, piano. [John Newton, prod.] BOSTON BRASS BB 1001, \$5.75 postpaid (available from Ronald Barron, 18 Turner Terrace, Newtonville, Mass. 02160).

**GUILMANT: Morceau symphonique, Op. 68. SAINT-SAËNS: Cavatine, Op. 144. SALZEDO: Pièce concertante, Op. 27. ROPARTZ: Pièce, in E flat minor. BOUTRY: Capriccio. BERGMANS: La Femme à barbe. DEFAYE: Deux Danses.**

Boston Brass is a new independent label run by Ronald Barron, who has recently risen in the ranks to first trombone with the Boston Symphony. Hopes are high to record and issue more offbeat recitals by first-chair BSO brass players. Meanwhile, three of the younger members of that section are part of the Empire Brass Quintet, whose first record is due shortly from Columbia.

If trombone recitals don't crop up every day, it may have something to do with the scantiness of good music for that instrument. (It's not all that easy to write gratefully for.) Surprisingly, none of the material here is transcriptions and some of it is rather strikingly appealing. Joseph Guy-Ropartz (1864-1955) was evidently a very



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solid product of the French Romantic school, and his *Pièce* breathes the darkly agitated mood of (with something close to a thematic quote from) Franck's piano quintet. The Boutry *Capriccio* is a catchy, often syncopated work of considerable rhythmic lability, and the *Sacred and Profane Dances* of Defaye are imposingly sonorous. Saint-Saëns' *Cavatine* is perhaps of less interest than these. All the works are written with obvious flair for the instrument.

Darron is a consummately skillful virtuoso. (He plays two different trombones here.) The record is well named, for aside from the ethnic roots of the composers I would characterize the renditions as Gallic in style (judging from the one comparison I could make with another recording, Henry Smith's more weighty and Germanic version of the Guillemant *Morceau symphonique* on Columbia MS 6791). Fredrik Wanger is a capable accompanist, and the acoustics of the auditorium at the Boston Conservatory, on whose faculty Barron teaches, are highly congenial. The pressing is first-rate, and my only complaint is that the space on the jacket could have been used for more information on the pieces played and their composers, rather than bilingual notes of a more general nature. A.C.

**TERESA BERGANZA:** Spanish Songs. Teresa Berganza, mezzo-soprano; Felix Lavilla, piano. [Rainer Brock, prod.] DEUTSCHE GRAMMOPHON 2530 598, \$7.98.

**DE ANCHIETA:** Con amores la mi madre. **DE LA TORRE:** Pámparo verde. **ESTEVE:** Alma sintamos! **GRANADOS:** Six Tondillas. **TURINA:** Saeita en forma de Salve a la Virgen de la Esperanza. El Fantasma. Cantares. **GURIDI:** Llámale con el pañuelo; No quiero tus avellanas; Como quieres que adivine! **MONTSALVATGE:** Canciones negras.

Apart from the songs by Juan de Anchieta (1462-1523), Francisco de la Torre (fl. c.1600), and Pablo Esteve (c. 1730-94), which have been arranged for voice and piano by Arne Dørumsgaard and which I would rather hear with instrumental or guitar accompaniment, there is little to cavil at in this recital. Most of it is devoted to modern composers and demonstrates forcefully the continuing vitality of the art song in Spain. Few of these pieces will be unfamiliar to lovers of the genre, but they deserve wide circulation, nonetheless. The *tonadillas* of Granados are, of course, famous—deservedly—for their vibrancy and, in the case of the three *Maja dolorosa* songs, their emotional intensity. The Turina songs include the chillingly ironic "El Fantasma," in which love is pictured as a ghostly visitant, from his four-part *Canto a Sevilla*.

Jesús Guridi (1886-1961) is represented by three first-rate songs, including the beautiful "No quiero tus avellanas," from *Seis Canciones castellanas*. The five *Canciones negras* by Xavier Montsalvatge (born 1912), memorably recorded by Victoria de los Angeles, bear rehearing for their dramatic potency and pictorial brilliance. The evocation of a vanished Cuba (before, as Rafael Alberti's text has it, "SI became YES") is as powerful as ever.

Teresa Berganza, here and throughout, is at her most vocally assured. She is also more communicative than in many of her earlier recordings. Her partnership with Felix Lavilla, who plays beautifully, is ideally close. Fine recording and pressing. Texts and translations. D.S.H.



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moments. "Midnight Prowl," with its insinuating rhythms and menacing guitar line, is eminently listenable.

"Black Rose" is an LP in which the producer does masterful things to bland material and achieves a fair result. Asher should have stood over Souther until they had ten songs—no matter how long it took—that were worth recording. H.E.

**STEVE GOODMAN:** Words We Can Dance To. Steve Goodman, vocals and guitar; vocal and instrumental accompaniment. *Roving Cowboy; Tossin' and Turnin'; Unemployed; Between the Lines; Old Fashioned; Can't Go Back; Banana Republics; Death of a Salesman; That's What Friends Are For; The Story of Love.* [Steve Goodman, prod.] ASYLUM 7E 1061, \$6.98. Tape: ●● TC5 1061, \$7.97; ●● ET8 1061, \$7.97.

Steve Goodman is a fine singer/songwriter who has done a lot better than he does on this recording and, I hope, will do better in the future. The LP is an odd one, in a holding pattern between boredom and in-consequence.

Seven of the ten songs were written by Goodman in conjunction with an assortment of collaborators, and some of these are positively awful—"Banana Republics" and, even worse, "Death of a Salesman" head that list. The rest of Goodman's compositions are either uneventful or too familiar. In "Between the Lines" (not to be confused with the Janis Ian song of the same title), he tackles nothing less than the meaning of a man's existence. He gets off to a good start but very soon falls back on clichés about unmeant love and the idea that "old folks are wiser and sadder."

The three non-Goodman compositions are the album's best, including Mike Smith's "Roving Cowboy" and a congenial reading of the old rock-and-roll hit, "Tossin' and Turnin'." M.J.

**\* ELTON JOHN:** Here and There. Elton John, vocals and piano; Nigel Olsson, drums; Dee Murray, bass; Davey Johnstone, guitar; Ray Cooper, percussion. *Skyline Pigeon; Border Song; Honky Cat; Love Song; Crocodile Rock; Funeral for a Friend; Love Lies Bleeding; Rocket Man; Bennie and the Jets; Take Me to the Pilot.* [Gus Dudgeon, prod.] MCA 2197, \$6.98. Tape: ●● C 2197, \$7.98; ●● T 2197, \$7.98.

Many rock performers, long accustomed to the luxuries of the recording studio, regard concert performances in a manner befitting James Bond—that is, they think they have a license to kill. The victims of that slaughter are usually their own songs. I am happy to report that Elton John, who has seldom failed to brutalize fashion, has not seen fit to do the same with his music.

This "live in concert" album is a good one, containing ten of John's best songs, each of them performed with intelligence and care. The first side was recorded at the Royal Festival Hall in London, at a benefit attended by Princess Margaret. The second side was taped during a Thanksgiving performance at Madison Square Garden in New York. One might quibble with one or two of the selections. I feel that "Love Song" (not a John composition) and "Fu-



Neil Sedaka  
Out of the vault.

neral for a Friend" aren't up to the standard of "Border Song," "Love Lies Bleeding," and "Take Me to the Pilot." But all in all, this is a worthy LP. M.J.

**\* NEIL SEDAKA:** Steppin' Out. Neil Sedaka, piano and vocals; vocal and instrumental accompaniment. *Sing Me; You Gotta Make Your Own Sunshine; #1 with a Heartache; Steppin' Out; Love in the Shadows; Cardboard California; Here We Are Falling in Love Again; I Let You Walk Away; Good Times, Good Music, Good Friends; Perfect Strangers; Summer Nights.* [Robert Appere and Neil Sedaka, prod.] ROCKET PIG 2195, \$6.98. Tape: ●● C 2195, \$7.98; ●● T 2195, \$7.98.

Neil Sedaka has been withdrawn from the vault of rock and roll history, in which he sat for more than a decade, growing fat, losing hair, and presumably living off the royalties from such teenybopper hits as "Breaking Up Is Hard to Do." In his reincarnation, he appears not as a teenybopper idol so much as a serious rock singer who also happens to have a youthful, charming quality.

Recently Sedaka redid "Breaking Up Is Hard to Do" in much the same manner as Barbra Streisand redid "Happy Days Are Here Again"—as a pleasant cabaret song. Now, on "Steppin' Out," he continues this trend toward good, solid music. Most of the tunes are upbeat, happy rockers that are great fun to hear. High among them are "Sing Me" and "Good Times, Good Music, Good Friends," but the best is "You Gotta Make Your Own Sunshine," with its old-fashioned rock and roll beat. The album also includes several ballads of note. There is a very good country song titled "#1 with a Heartache," a statement on the loneliness of the top recording star.

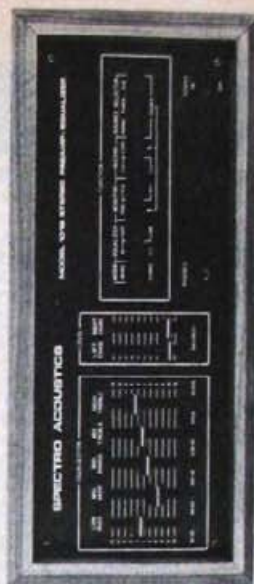
One tune does fall short. That is "Cardboard California," written by Sedaka with Howard Greenfield. It contains a pretentious, clichéd lyric about the sins of Southern California and its "cold plastic people with phony facades." But one dead fish does not a bad album make, and overall "Steppin' Out" is of high caliber. Apart from Sedaka's enthusiastic and boyish voice, there is a great deal of good music.

Continued on page 104

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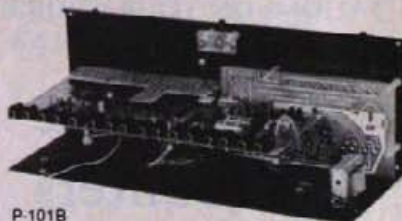
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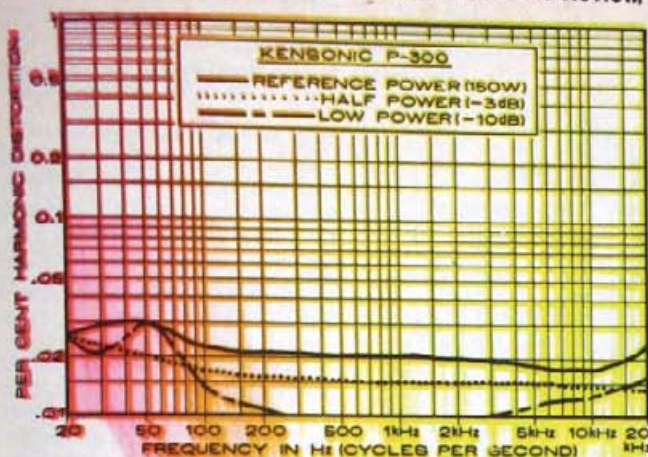


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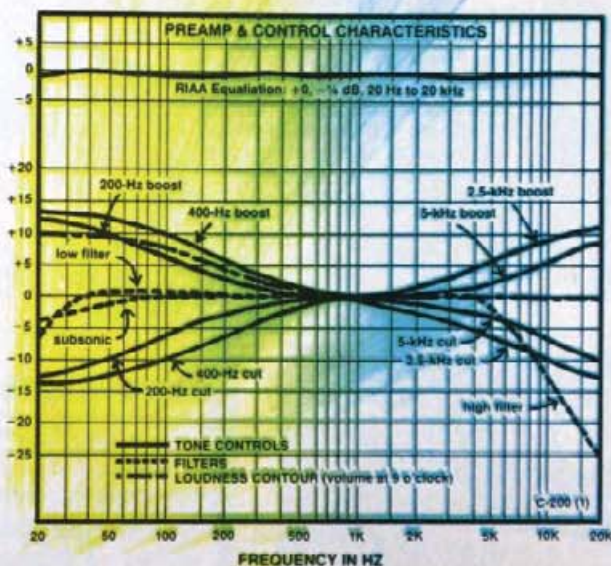
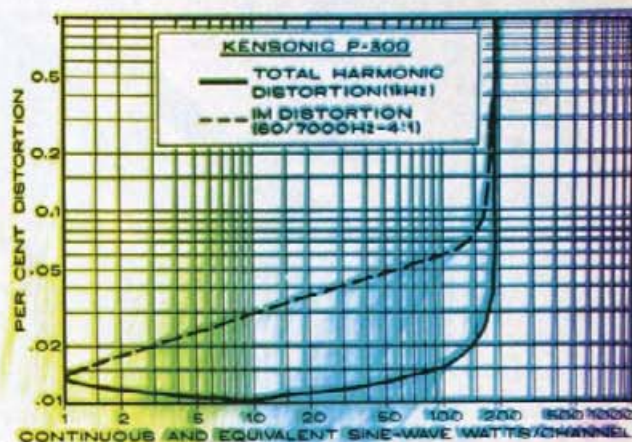
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cianship, especially from Nigel Olsson and Russ Kunkel on drums and Richie Zito and Dean Parks on guitar. Jim Horn's horn arrangements are also worthy of praise. M.J.

**THE SUPREMES: High Energy.** The Supremes, vocals; rhythm, strings, keyboards, and percussion accompaniment. *High Energy; I'm Gonna Let My Heart Do the Walking; Only You (Can Love Me like You Love Me);* five more. [Brian Holland, prod.] Motown M6 863S, \$6.98. Tape: M7 863HC, \$7.98; M7 863HT, \$7.98.

Even though the Supremes roll on, time has not treated them well. With only one member of today's group an original Supreme, the sound of the three women is now built around an irritatingly shrill falsetto. When applied to mediocre material, this sound becomes even more offensive, and there's plenty of offensiveness on this disc.

These excursions into progressive soul (as exemplified by recent Temptations albums) as well as the currently popular dance pulse are meaningless unless the tunes themselves have quality. Slickly arranged and earnestly performed, "High Energy" makes for lackluster listening, because pounding rhythms do little to camouflage emptiness. H.E.

## Theater and Film

**\* DAVID RAKSIN CONDUCTS HIS GREAT FILM SCORES.** New Philharmonia Orchestra, David Raksin, cond. *Laura; The Bad and the Beautiful; Forever Amber.* [Charles Gerhardt, prod.] RCA RED SEAL ARL 1-1490, \$6.98. Tape: ARK 1-1490, \$7.95; ARS 1-1490, \$7.95.

This new disc devoted to the music of David Raksin is one of the absolute treasures to surface so far in the ongoing film-music revival. It also represents a departure from the directions earlier pursued by RCA. To begin with, this time the composer himself conducts the orchestra, which is not the hybrid (yet excellent) National Philharmonic, but the New Philharmonia, one of England's finest. More importantly, the composer has limited himself to three selections, as opposed to the half-dozen or so on most of the "Classic Film Scores" releases.

As a result, the extensive and beautifully organized suite from Otto Preminger's 1947 *Forever Amber* has room to develop and reveal all its deep, often complex emotional turns, which are elaborated in a profoundly unified structure having much the formal impact of a Sibelian symphony. It is a score in which everything is somehow inter-related, from the old-England flavored but asymmetrical main theme to the almost overwhelmingly tragic dirge that climaxes the long "Whitefriars" movement, which is built around a ground-bass line Raksin calls a "quasicaglia."



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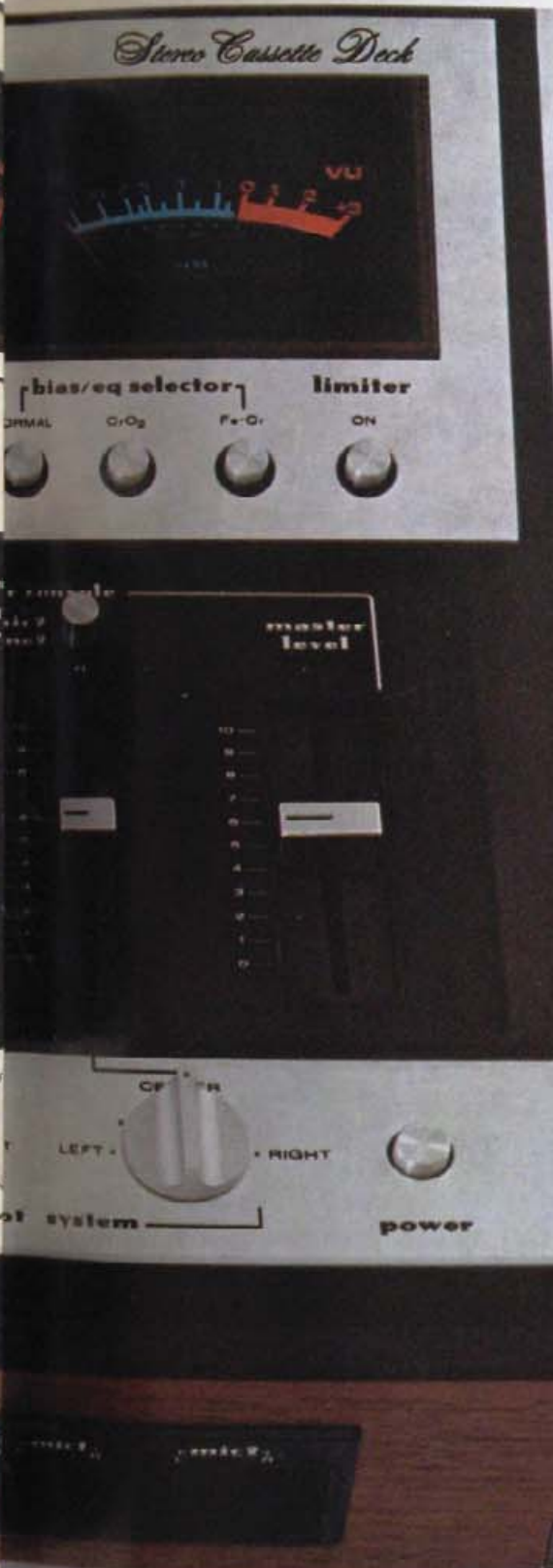
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