

Audio • Video • Autosound

High Fidelity Trade News

A PUBLICATION OF COMMUNICATION CHANNELS, INC.

MARCH 1983



**This Space
Available**

**We'll Show You More Than
Three Dozen Ways To Fill It**

HOW COULD A CASSETTE DECK WITH TWO HEADS BE SO HARD TO GET?



The Kyocera D-801 Cassette Deck is hard to get because so much more is built into it. For example, it has five circuit boards where most decks have only one or two. But that's only the beginning.

It more than meets the ultimate tape deck challenge.

The challenge is to move tape across the heads at as nearly a constant speed as possible. Variations in speed, of course, come out in your speakers or headphones as wow and flutter.

Many decks claim a wow and flutter figure of 0.05% WRMS—trouble is, speed variations of 0.05% are clearly audible with piano music (one of the most revealing tests you can give a cassette deck—try it on the D-801 and marvel!).

The D-801 by Kyocera comes through with a remarkably low wow and flutter figure of 0.02% WRMS—and that is derived from a unique, three-motor, dual capstan drive mechanism. Two capstans are driven by a direct drive motor. A beltless/clutchless simple DC motor drives the feed and takeup reels, while a third motor is used as a head-position assist drive (it greatly prolongs head-to-tape azimuth accuracy). The dual capstan system provides that sensationally accurate tape travel, maintaining proper tension between capstans to eliminate external shock source modulating noise.

It more than meets the needs of the audio perfectionist.

The D-801 goes above and beyond even the fussiest audiophile's needs with 3-position bias/equalization selection (with fine bias adjustment), 400 Hz calibration tone, Automatic Program Mute Recording, automatic search, and electronic 4 digit display, including counter, elapsed time and time remaining functions.

The D-801's noise reduction systems were built for the audio purist. It has two—Dolby® B & C—Dolby B for music material of limited dynamic range, Dolby C for music of the widest dynamic range, so noise reduction can be tailored to program material.

Finally, the specs everyone wants: frequency response of 30-20,000 Hz \pm 3 dB using metal or CrO₂ tape, and a S/N ratio of 78 dB with metal tape in Dolby C NR mode.

If you have any trouble finding a Kyocera dealer, contact: Cybernet International Inc., 7 Powder Horn Drive, Warren, NJ 07060 (201) 560-0060.



KYOCERA

*Dolby is a registered trademark of Dolby Laboratories, Inc.

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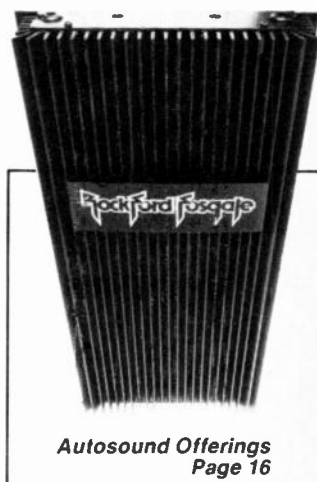
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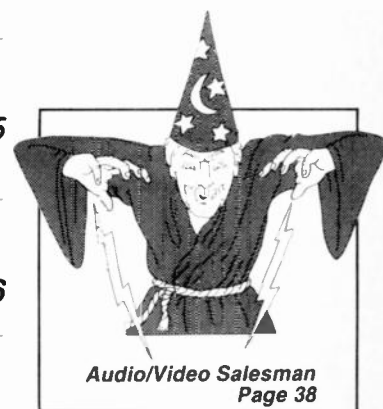


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Put Great Sound
At Your
Fingertips!

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The Cover: There are millions of dashboards out there equipped with factory-installed or bargain-basement cassette players. The potential up-grade market is limitless for those retailers ready to cash in. Photo by Bill Coker

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“Alice In Audioland”

Editor's Note: In these days when everybody from the corner druggist to the local jeweler can meet or beat the prices on what was once your best-selling merchandise, it's easy for your customers to lose sight of the benefits they can gain by shopping with you. Your knowledge of the product they are considering and your ability to service it are two key points to remember when planning advertising.

But there's another benefit you should provide that isn't easily advertised, but that just as importantly sets you apart from the mass merchandisers and discount houses. It's courtesy. And, as the following narrative by advertising representative Lynn Anding points out, it can mean all the difference to a potential customer trying hard to justify spending a few extra dollars at your place.

Twice in my 34-year existence have I found it necessary to march myself into a hi-fi store coliseum. The score after the initial visit, “Dragons — one, Knights — nothing.”

It all started five years ago. Although sadomasochism currently is enjoying a certain vogue, I find humiliation painful in the extreme. Armed with my entire life's savings (\$500), I confidently strode through the front door knowing that evening I would be woofing and tweeting to the collective dismay of my neighbors.

As I approached a group of salesmen and proudly held out my hard-earned, gotta-wear-last-year's-shoes, no-vacation-again, grocery money, I beheld a reaction akin to one I might have expected if I had announced Mick Jagger was dead. One of the group recovered slowly and begrudgingly “assisted” me in selecting a “system.” Feeling leper-like, I left, returned home and “connected” my “system,” an undertaking that the salesman had assured me required an MIT degree in engineering coupled with divine intervention. Both, of course, were guaranteed if the job were done for me in my home by one of “his” people a week from next Thursday — for \$100. As paying this amount would have resulted in my telephone being turned off, I elected to give the installation a shot, myself.

I really must send a thank you letter to my “engineering professor” — my first grade teacher who explained that + is different from — and that electrical plugs go into the wall to make things work.

My neighbors were pounding on the walls in very short order, while I danced and sang with child-like glee to every record, tape and FM station I could find! Phooey on all those frustrated, pony-tailed cretins in their Grateful Dead T-shirts, I said defiantly.

Not to worry — this whole story has a happy ending. After working on High Fidelity Trade News three whole weeks, I armed myself for battle in a different store in my neighborhood. (After all, it had been five years and the scars had healed, almost.) I was greeted cordially by Jim Coleman, owner of the Audio Salon on Second Avenue in New York. Sheepishly, I told him I had a couple hundred dollars to spend on a turntable and then thought I'd show off by telling him that I had read that one-third of the price of the unit should be spent on a good cartridge.

With heart pounding, I waited for the “have you tried Sears” response, but instead I was treated to a half hour, friendly, informative consultation that resulted in the purchase of a fine belt-driven turntable and an excellent cartridge.

After balancing the unit and packing my precious cargo in a box (suitable for transport on the Columbia space shuttle), one of his salesmen gingerly carried the unit to my apartment for me. As I walked him to the door, he remarked cheerfully, “Enjoy your new turntable, and if you have any problem with any of your system, don't hesitate to call us and we'll send someone over.”

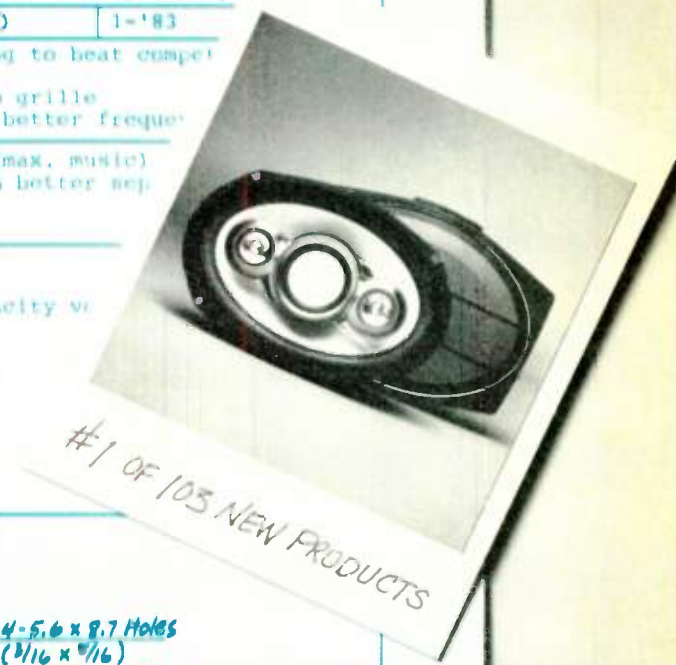
As I closed the door, I smiled and thought, “Dragons — one, Knights — one.” One good turn(table) deserves another.

— Lynn Anding

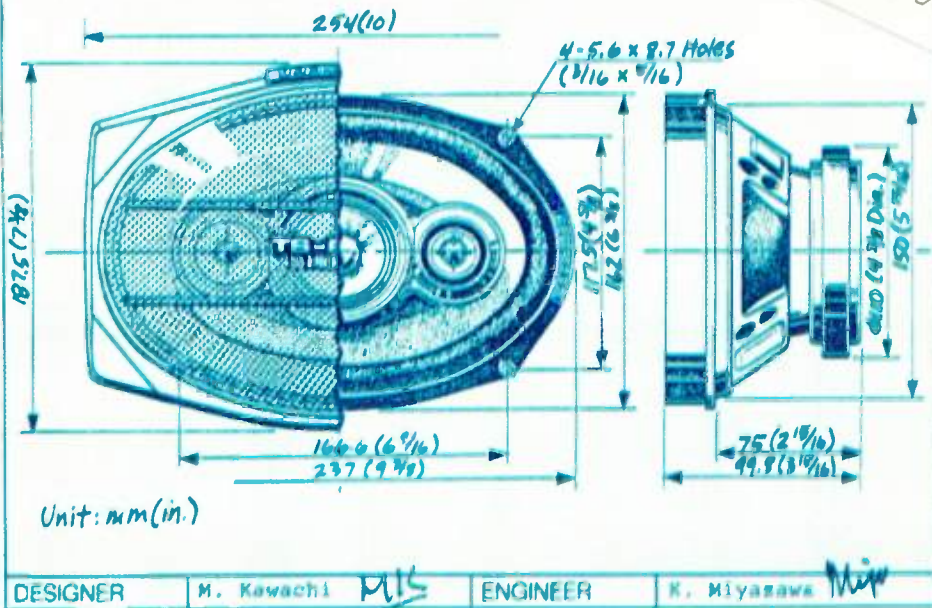
GOOD NEWS FOR YOUR POWER-HUNGRY CUSTOMERS.

PIONEER
NEW PRODUCT PROFILE - 1983

MODEL NO	TS-6907	PRODUCT NO	1 of 103
DESCRIPTION	Maxxial 6" x 9" Rear Deck Mount 4-way car speaker		
T.M.P.	End 11-'82	T. INTRO	1-'83
DEVELOPMENT CONCEPT	<ul style="list-style-type: none"> *Achieve 100W power handling to beat comp. *Maintain price points *Give new hi-tech design to grille *Increase driver count for better frequency 		
SELLING POINTS	<ul style="list-style-type: none"> *100W high power handling (max. music) *High-end 4-way system with better sep. highs, midranges, lows *Hi-tech cosmetics 		
FEATURES	<ul style="list-style-type: none"> *Max. music power 100W *4 ohms impedance *Newly designed larger capacity voice coil *Strontium magnet *New 4-way system *Rear deck flush mount *Rugged perforated grille 		



DESIGN DRAWING



DESIGNER	M. Kawachi <i>MKS</i>	ENGINEER	K. Miyasawa <i>Miy</i>
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PIONEER
Because the music matters.

PANASONIC VP RESIGNS TO MAKE CAREER CHANGE: Jeff Berkowitz, Panasonic vice president handling the Technics and Panasonic Home Audio brands, resigned Feb. 28 after 20 years. "It was basically a career-oriented move," Berkowitz told *High Fidelity Trade News* while still at Technics' helm. "I was looking for different areas and certain things appeared that seemed to offer more challenge and more scope." Berkowitz said he has received a few offers but that he was not planning to make a final decision about the future until the end of this month, after a two- or three-week vacation. His management responsibilities at Panasonic now have been divided between Mike Aguilar, as general manager for Technics, and Dick Lovisolo, as general manager for Panasonic audio.

LASERDISC DEMAND ALLOWS PIONEER TO BOOST PRODUCTION: Pioneer Video Inc. has added a second work shift to its Carson, Calif., video disc manufacturing operations, relocated its video mastering and processing facilities to the expanded Carson facility and consolidated several satellite industrial sales offices into its regional sales offices, all in response to increased demand for consumer and industrial video discs. CEO Ken Kai said demand "has required that we reach our objective of a million discs a year from the Carson plant sooner than late 1983," and called the organizational changes a demonstration of the corporation's preparing itself to fulfill its commitment to the video disc business.

BOSE SEEKS TO CAPITALIZE ON CANADIAN MARKET POTENTIAL: Bose Corp. of Framingham, Mass., has acquired its Canadian distributor, Ro-Bar Electronics Systems Ltd. of Toronto, continuing its efforts to tap the loudspeaker market in Canada. In the past two years, Bose has invested heavily in its existing cabinet-making subsidiary in Ste.-Marie, Quebec, a facility that now also produces the Bose 301-Series II loudspeaker for Canadian distribution and that is expected to produce other Bose products for the Canadian market in the future. Larry Russell of Ro-Bar is serving as general manager of the new Bose distribution subsidiary.

MAXELL MARKETING EXEC TO COORDINATE PRODUCT LINES: Herb A. Matsumoto has been named vice president, general manager, marketing/sales for Maxell Corp. of America, a position created to coordinate Maxell's various product lines and maximize production efficiency. Matsumoto is responsible for overall direction of marketing and sales for all Maxell divisions.

ATARI CHALLENGES COLECO ADAPTER: Atari has amended its lawsuit against Coleco, asking the court immediately to enjoin Coleco from selling an adapter that allows Atari VCS cartridges to be played on the Colecovision home video game unit. Atari said it had learned through depositions from a Coleco official in its original suit that, according to the official, Coleco took the electronic circuitry of Atari's 2600 VCS, put it in a housing with Coleco's name on it and demonstrated it as its own from January 1982 to September 1982.

DISCWASHER RECOGNIZES OUTSTANDING REP: The Elmark Co. has been named Rep of the Year for 1982 by Discwasher for excellence in sales and merchandising. The rep firm covers Maryland, Virginia, Delaware, Eastern Pennsylvania and Southern New Jersey.

RADIO STATION TESTS DIGITAL DISC PLAYER: WNCN, a classical FM radio station in New York, has begun on-the-air testing of a digital compact disc player, which it obtained on loan from Denon. It is the station's first step toward purchasing a DCD player. The Denon DC-2000, on the market in Japan, has been made available in the United States during the past few months for demonstration purposes.

TEXAS INSTRUMENTS REVEALS SHOCK HAZARD IN 99/4A: As a result of testing that revealed a possibility that, under certain conditions, transformer failure in TI's 99/4A home computer could cause an electrical shock to the user, Texas Instruments has ceased shipping the model. TI is asking retailers carrying the computers to stop selling the units until TI can provide transformer adapter cords designed to guard against the defect. TI also is providing special green "safety assurance" labels to be placed on units that have been outfitted with the corrective cord.

New PS-8 and PS-10 Point Source Loudspeaker Systems from Design Acoustics.



**If we made them
look like other loudspeakers...
that's all they would
sound like.**

*Learn the difference you can see, hear and sell.
Ask for a demonstration from your Design Acoustics rep today.
Design Acoustics...the difference spells profit.*

DA DESIGN[™]
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An Audio-Technica Company

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Circle No. 3 on Reader Service Card

World Radio History

Tech Hifi Meets With Creditors

BOSTON — Coming off a sluggish 1982, Tech Hifi managers took a look down the road and saw themselves at the top of what could have become a downward spiral, said merchandising vice president Rick Deutsch. So they took a lesson from other electronics retailers that, he said, waited too long before contacting their suppliers then found themselves facing Chapter XI bankruptcy proceedings and called a meeting of their suppliers Jan. 19.

"It made sense to us to acknowledge our problems with our suppliers and tap their input," Deutsch said. "Manufacturers have had problems with retailers failing for years. They were bound to have done some analyzing to find out what went wrong, so we thought we could benefit from their experience."

The idea of contacting suppliers before the situation became irreversible was somewhat new to an industry notoriously bad at maintaining close relationships between retailers and manufacturers, he said, but so far Tech Hifi's efforts have proven successful.

"We are getting excellent cooperation and guidance from our suppliers. They have suggested cost-cutting measures and several improvements for our operation. They almost have become like an extra board of directors," he added.

Currently Tech Hifi's fiscal leaders are formulating some specific plans with the Boston-based chain's suppliers to work around cash flow problems.

Deutsch said he could not pinpoint any specific causes of the company's cash flow predicament but that the retailer faced the same general problems everyone in the industry has suffered. The slowdown of the overall economy, discounters who picked up the popular items and priced them away from specialists and the popularity of new products, such as computers and games, that took sales away from the more profitable stereo all combined to reduce the ratio of cash coming in to cash going out of the Tech Hifi coffers, he explained.

So, with the help of its suppliers, the company is diversifying, improving its operations and doing some overall "fine tuning" to make sure that one year from now, it doesn't find itself in the dangerous position its crystal ball predicted.

Computers, Games Expand June CES

CHICAGO — The impact of computer and game hardware and software on the consumer electronics industry created an unprecedented demand for exhibit space at recent Consumer Electronics Shows.

In response to this need, the Electronic Industries Association/Consumer Electronics Group has added 100,000 square feet of exhibit space that will be devoted especially to computers and games to the 1983 International Summer Consumer Electronics Show. The addition of the McCormick West facility enables the show to accommodate more than 1,000 exhibitors using, in all, 700,000 square feet of exhibit space.

The emphasis on computers and games also has prompted show planners to organize a new program of conferences, seminars and workshops at McCormick West to assist in the integration and growth of the product category.

Early this spring, EIA/CEG is launching what it calls the "largest

Ampex Announces Winning Dealers



Harry McGee, National Audio-Visual Association, and Richard Antonio, Ampex national sales manager, select South Central winner at COMMTEx show.

REDWOOD CITY, Calif. — Ampex Corp.'s Magnetic Tape Division recently announced the seven grand prize winners in an incentive program for 300 domestic distributors of Ampex industrial, audio and video tapes.

Ampex's "5-in-1 Spectacular" allowed distributors who submitted \$1,000 worth of orders to qualify for entry coupons in a grand prize drawing for a complete General Electric "Home and Away" video system, including a portable entertainment center, a color video camera, a portable VCR tuner, a portable VCR deck, a compact widescreen TV with coordinated accessory cabinet, a set of VCR and camera accessories, plus 50 Ampex VHS professional video cassettes.

The seven winners, by sales re-

gion, are: Camera Mart of New York for the Northeast Region; Loftstrom Electric of Glassport, Pa., for the Mid-Atlantic Region; Vaughan Associates of Sarasota, Fla., for the Southeast Region; American Audio Systems of Madison, Wis., for the Midwestern Region; W.B. Allen Supply of New Orleans for the South Central Region; Video Tape Products of Hollywood, Calif., for the Southwest Region and Alaska Electronic Supply of Anchorage, Alaska, for the Northwest Region.

Ampex national sales manager Richard Antonio said the incentive program was one of the most successful ever. "This is the fourth year in a row that Ampex has run this type of program," he said, "with sales almost doubling in each successive year."

ever advertising and promotion campaign" to all segments of the industry in the United States and abroad. The campaign includes advertisements in some 40 U.S. and overseas trade publications, direct mail promotions to 150,000 prospective attendees, CES promotion booths at European trade shows and periodic press briefings.

The Summer CES is scheduled for June 5-8 in Chicago at McCormick Place, McCormick Inn, the Conrad Hilton Hotel and McCormick West.

EIA/CEG Offers Sales Training

WASHINGTON, D.C. — To assist retailers in communicating the increased information consumers need in purchasing today's sophisticated audio, video and computer products, the Electronic Industries Association/Consumer Electronics Group has launched a series of training seminars for retail salespeople.

The initial training sessions for 1983 are being held March 7, 8 and 9 in New York and Philadelphia, and plans call for extending the series to many more major markets during the year. During 1981 and 1982, sessions were conducted in Washington, D.C., Boston, Chicago, Denver, San Francisco and Houston, with more than 1,000 salespeople completing the course.

In the first half of the full-day session, Len Feldman lectures about audio and video topics ranging from components and specifications to the future of stereo TV and stereo AM radio. A luncheon is followed by Jack Berman's discussion about the processes of customer education and selling.

The cost for a participant, \$25, includes the seminar, breakfast, a luncheon and coffee breaks.

Avon VCR Order Sets RCA Record

NEW YORK — A purchase of 15,500 video cassette recorders by Avon Products Inc. became the largest single VCR order in RCA's history.

The units were purchased for Avon's nationwide sales organization, specifically district sales managers and group sales leaders, to enable professional training through the "Avon Success Network," an Avon produced videotape series about a variety of business-related subjects.

District sales managers, who re-

cruit and motivate Avon representatives, are using the RCA model VGT-205 VCRs during training sessions. Group sales leaders, independent sales representatives who lead and motivate groups of 20-30 representatives, are using the units during group meetings.

Memorex Renamed

SAN FRANCISCO — Memorex Consumer Products has changed its company name to Memtek Products, a move coinciding with the re-

cently completed acquisition of the Memorex Consumer Products business by Tandy Corp. of Ft. Worth, Texas.

As a new division of Tandy, which also owns Radio Shack, Memtek Products is operating independently of other Tandy activities, continuing to manufacture and sell Memorex brand audio and video tapes from its Santa Clara, Calif., facilities.

John Humphreys directs Memorex operations as vice president and general manager of Memtek.

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COMPUTERAIDS

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Circle No. 4 on Reader Service Card

Capitalizing On The Compact Disc

Cerwin-Vega Is Designing Speakers With "Huge Dynamic Range . . ."

"There's an ultimate new wind blowing out of the west, not the east," says Herb Horowitz, recently appointed vice president/sales and marketing for Cerwin-Vega, about the company's entry last year into the relatively untapped realm of digital sound.

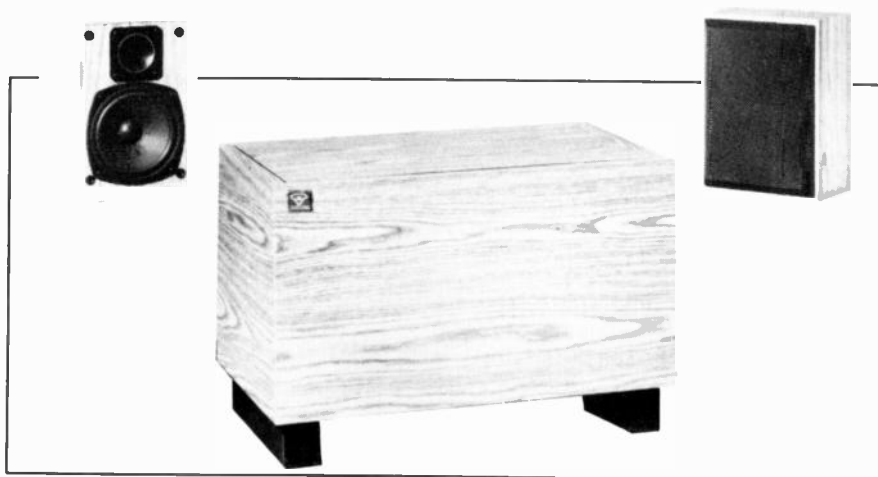
Horowitz's reference to east and west in sound reproduction stems from his conviction that although many various electronics innovations originated in Japan, the Japanese do not seem all that interested in how the music that is reproduced actually sounds to Western ears or in what Western listeners prefer. Therefore, he said, it may well be up to American and Western European speaker manufacturers to come up with the ultimate in sound reproduction for Western markets.

Horowitz and Cerwin-Vega's director of research and engineering, Dr. Marshall Buck, believe the company came up with the first step in that process last summer when it introduced its first line of Digital Series loudspeakers at the June CES. Horowitz said the line, ranging in price from \$500 to \$900 per pair at retail, was distinguished by its "huge dynamic range," impervious to the highest volume levels.

Cerwin-Vega also introduced at that time a line of Sat-1/SW-10 satellite speakers for use with the SW-10 subwoofer.

According to Horowitz, the Digital Series met with positive dealer and consumer reaction. "The new line has exceeded all performance and sales expectations," he said. Since the line's introduction, Cerwin-Vega marketing and sales executives have been traveling the world demonstrating the Digital Series speakers with especially prepared digital demonstration tapes.

"When demonstrated with original digital source material, the speakers really stand out," Horowitz



C-V's Sat-1/SW-10 satellite speakers and subwoofer introduced last summer

explained. "The low distortion, wide dynamic range and their ability to reproduce digitally recorded material accurately and in-phase has just overwhelmed all those who have heard it. Orders are well ahead of projections."

The company now is planning to make some of the special digital recordings, which can be reproduced by means of VCRs and PCMs, available to Cerwin-Vega dealers who can use them to demonstrate the Digital Series in their stores.

The next step in refining the link between digital recording and its reproduction in the home already is under way. Four new high-end loudspeaker models meeting the requirements for digital playback in the home were unveiled in January at the CES. Tentatively scheduled for the new line, most of which is still in the development stage, are two full-range, floor speaker systems, a bookshelf system and a satellite/subwoofer system.

Each of the models will feature the point source mid-axial driver system recently patented by Cerwin-Vega, Stroker woofers and

Thermo-Vapor Suspension cabinets with genuine walnut wood and veneer finishes. They also will be equipped with Cerwin-Vega's DB-10 Bass Turbocharger, which interconnects between the amp and preamp to reduce subsonic rumble while making sound audible in the 30 to 45 Hz region. The Turbocharger also effectively doubles the power handling capacities of the speakers, according to Cerwin-Vega engineers.

In addition to the digital recordings being provided to dealers for in-store demonstrations, an aggressive marketing campaign is being planned to attract retailers and customers to participate in the experience of digital audio. At least for the time being, Horowitz said, Cerwin-Vega will be concentrating on the trade print media. "It (advertising) is very costly, and right now we just don't have the money for an extensive television ad campaign," he said.

However, the company does plan such dealer-level merchandising and promotions as an instructional "Digital White Paper," T-shirts, posters and descriptive literature.

... While Phase Linear Has Developed Amps With Dual Voltage Power Supplies

While some consumers impressed with the novelty of new digital audio technology may be satisfied by simply adding Compact Disc players to their existing sound systems, Phase Linear is betting that some will want to do some upgrading in order to achieve the full benefit of the digital disc's complete dynamic range.

"We sincerely believe that the new digital audio technology will change the amplifier buying habits of many consumers," said Fred Hackendahl, Phase Linear's vice president and general manager. "The new digital discs have a dynamic range of 90 dB or more, and this requires an amplifier with an instantaneous peak power rating of well in excess of 700 watts to handle the musical peaks without clipping."

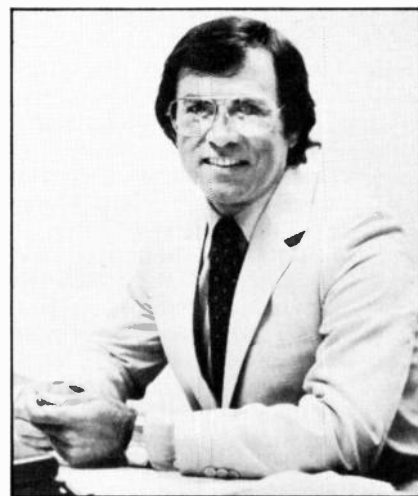
With this goal in mind, Phase Linear engineers set about the task of designing amplifiers with dual voltage power supplies. "This patent pending design," explained Tom Friel, vice president of sales for Phase Linear's Consumer Products Line, "delivers very high dynamic range capabilities coupled with high efficiency."

The new series of power amplifiers is dubbed DRS, which stands for Dynamic Range System. "There are very few amplifier and preamplifier components on the market that will satisfy the demands of dynamic

range put upon them by the marvel of digital audio," said the company's senior design engineer, Terry Pennington. He said the DRS amplifiers, however, are capable of power levels in excess of anything available for "anywhere near" an equivalent price.

"Take, for example, our DRS 900," he said. The DRS 900 operates efficiently using its continuous output power supply, which he said is rated conservatively at 150 watts per channel. When the music approaches a peak requiring more power, the secondary power supply cuts in automatically with enough reserve energy to produce 900 watts peak per channel into an 8 ohm load.

"A recent article by Julian Hirsch in *Stereo Review* indicated that a competing amplifier's meter indications showed that the program peaks on a specific digital disc recording reached between 250 and 500 watts per channel with a moderate average listening level," Pennington added. "A conventional 150 watt amplifier has a peak power rating of only about 300 watts. The DRS 900, with an available 900 watts peak per channel, is much more up to the job of accurately reproducing realistic sound pressure levels than the vast majority of our competition." Friel said consumers have to hear the difference between a conventional amp and a DRS amp to appreciate the lifelike sound quali-



Tom Friel, vice president/sales

ties of the new Phase Linear series. "For demonstrations," he said, "we suggest to our retailers that they use a recording of a musical selection with an inherently wide dynamic range, such as Tchaikovsky's *1812 Overture*, which we also mention in our consumer ad. Consumers can't help noticing how accurately the DRS 900 reproduces the cannon shot in the *Overture*."

In an effort to complement the DRS series of amplifiers, which also includes the DRS 400 power amplifier and DRS 250 integrated amplifier, Phase Linear has introduced a full featured Compact Digital Disc Player.

Meanwhile, Manufacturers Plot Distribution Strategies

After considerable gestation, the U.S. market for digital audio equipment is finally in the delivery room, judging by exhibits at the recent CES. A number of audio companies showed their versions of the digital audio disc player, all based on the format developed by Sony/Philips. Current plans call for the first digital audio disc players to reach consumer hands this month.

One question facing manufacturers of the new product is what type of retailer would do the best job of distribution. According to a study by Venture Development Corp., *Consumer and Professional Digital Audio Equipment: A Strategic Analysis*, retailer acceptance will play a pivotal role in the success (or lack of it) of digital audio in the marketplace.

Digital audio disc player manufacturers are adopting different retail distribution strategies. Sony, for example, is initially planning to sell its digital audio disc player through a limited number of audio specialists. One reason for choosing this approach is that Sony believes specialists will be able to demonstrate the new equipment properly and effectively.

The digital audio disc player's co-developer, Philips, will be taking a different approach through its Magnavox subsidiary. The company will sell digital audio disc players through an existing retailer network comprised primarily of department stores, home entertainment centers and TV/radio/appliance stores.

According to VDC's report, Sony's approach may be the more effec-

tive of the two. A survey conducted by the Wellesley, Mass., firm found that more than 43% of consumers would prefer to purchase a digital audio disc player from an audio specialist. Only 2% of those surveyed would prefer to obtain a digital audio disc player from a department store. About one quarter of VDC's respondents would prefer to buy a digital audio disc player through either mass merchant/discount stores or catalog/mail order outlets.

Two of the reasons consumers prefer specialist stores are brand selection and knowledgeable staff. Manufacturers such as Magnavox, who are using different distribution channels, will have to address these needs if they hope for near term success with digital audio equipment, according to VDC.

TDK Hopes Game Will Spur Sales

TDK Electronics Corp. designed its \$350,000 Pleasure Playback instant-winner game with two basic objectives: to bring potential customers into the retail store and to sell them on high-quality TDK recording tape products.

"The game establishes a new marketing approach for TDK that goes beyond the traditional audio and video markets," said Doug Chatburn, TDK national sales manager. "This year TDK is embarking on many different courses of action that will continue to support our traditional markets as well as new channels of distribution."

Through the end of this month, all specially marked TDK D, AD and SA audio cassette multi-packs, T-120 video single- and two-packs and a special CK-10 SA-90 promotional pack contain instant-winner game cards. Consumers who purchase these products rub off the appropriate spaces to reveal winning combinations. Grand prize is a 1982 silver-colored Corvette, valued at more than \$22,000, complete with an Alpine deluxe autosound system. Other prizes include a complete video recording system, top-of-the-line Nakamichi audio cassette deck and 65,000 TDK audio cassettes.

A second chance to win is given to all participants who fill out the reverse side of the game card and send it to the appropriate address by April 15. The winner of the random drawing receives a \$7,800 audio and video home entertainment center.

TDK is supporting its Pleasure Playback game with nationwide print and broadcast campaigns and extensive in-store merchandising materials.

Display Explains Chrome Message

PDMagnetics believes today's blank video tape consumers are faced with some confusing choices about which brands will best serve their needs for quality recording, so it has designed its point-of-purchase materials to assist the retailer in explaining its High Grade Performance chrome video cassettes.

Included among available sales aids are a counter display case that shows off 48 video cassettes in a



TDK game logo ties in-store promotions with national advertising.

pillfer-proof, high-impact plastic case; an open counter display case that holds 10 video cassettes; a peg-board package for a hanging display with informational copy; a video cassette "dangler" that is attached to a shelf to attract attention with its movement; a video shelf talker; a counter card that dispenses PDMagnetics product brochures and video cassette specification folders that provide concise technical presentations of the benefits of chromium dioxide video tape.

PDMagnetics also provides T-shirts, shopping bags, posters, window decals and the focal point of the new cassette promotions and advertising campaign, the "Pure Chrome — High Grade Performance" seal.

Shure Buyers Offered Albums

Buyers of Shure's V15 Type V phonograph cartridge are being offered a choice of two albums from a special collection of Nautilus SuperDiscs, albums valued at \$15 and more. According to Shure, the offer, which ends May 27, is intended to give new V15 Type V owners an opportunity to experience the cartridge's full sonic capabilities.

The Nautilus offer also applies to purchasers of Shure V15 LT and V15 Type IV cartridges, who are eligible to receive one free SuperDisc.

A packaging promotion has been designed for Shure Brothers' P-mount cartridges, the V15 LT, M97

LT, M94 LT and M92 LT-EP. According to Scott A. Masticola, Shure's high fidelity products manager, each Shure P-mount model features a kit containing all hardware necessary for conventional tone arm mounting, including a terminal pin adapter, screws and nuts and a mounting bracket.

The hardware kit packaged with each cartridge gives the owner the maximum benefit from his purchase because he is able to use the cartridge interchangeably with virtually any turntable, Masticola said.

Flyer Describes Dealer Aids

A flyer outlining the variety of dealer aids available to retailers stocking Pfanstiehl phonograph needles and the Pfantone line of audio and video accessories makes it easy for retailers to plan their in-store displays.

Posters, mobiles and window decals are among the offerings that create a visible sales message for styli and cartridges and video-, record- and tape-player products. Another example is Pfanstiehl's display for its most popular needles. Actual size photos of the needles are displayed on a full-color plastic mat with corresponding catalog numbers for easy selection.

A recent addition to the line of dealer aids is a consumer guide to the use of Pfantone video accessories. The printed piece features a

consumer's dictionary of commonly used video terminology and illustrated instructions for do-it-yourself video hook-ups.

Most of the dealer aids are free. The flyer is available from Robert Wight, director of marketing, Pfanstiehl, 3300 Washington St., Waukegan, Ill. 60085. Phone: (312) 623-1360.

Videodisc Player Sells Computer

The Pioneer laser videodisc system has been incorporated into a point-of-purchase display for retail stores that sell Apple Computer products. Talk show host Dick Cavett is the narrator on the disc program that gives customers quick answers to questions about the various ways to use Apple Computers.

The display system consists of a television monitor equipped with a touch-sensitive screen overlay on which the user can call up information by touching the appropriate section of an on-screen index generated by the Pioneer PR-7820 Model III videodisc player.

A Pioneer Serial Interface Adapter connects the display system to an Apple Computer that implements the user's selection of a specific segment of the video program. The videodisc display system's rapid access time allows the information requested to be displayed almost instantaneously.

Teknika Invites Customer Trial

Teknika Electronics Corp. hopes to encourage impulse buying of its add-on remote control TV tuner/cable converter accessories with a



Moving starburst attracts attention.

point-of-purchase display that urges customers to try them.

The display features a securely mounted working model of one of the units, interchangeable header cards for the two remote units, a battery-operated action card that spotlights the copy, "Try It!" and a built-in pocket for pocket-sized flyers. The hand unit is attached by a clamp and chain that allows the customer to hold and use it but prevents pilfering. The entire display fits atop a 19-inch or larger television.

Teknika retailers who purchase 10 units of either Model 6301 or 6401 can receive the blue and silver display free.

Advent Promotes Image And Name

A new consumer ad designed to emphasize Advent's quality image sparked more than 6,000 consumer inquiries within a month after it appeared in issues of *Stereo Review*, *Audio* and *High Fidelity*, according to Advent marketing services director Chuck Wendt.

"We're convinced that the unusually high response to this ad is a definite sign that consumers continue to have a high degree of loyalty to the Advent brand name," he said.

The ad is one of three recent additions to Advent's retailer support program. All respondents are sent product literature and the location of their nearest Advent retailer. Two other retailer promotions include a 1983 co-op ad planner and a four-page, four-color product brochure about the Advent 5012 loudspeaker.

Revox Equipment Includes Tape

The Revox Division of Studer Revox America Inc. has begun packaging free reels of tape and cassettes with Revox reel-to-reel and cassette decks.

A buyer of a Revox B77 or PR99 reel-to-reel recorder receives a free reel of 3M Scotch 226 tape and a metal take-up reel. A buyer of the Revox B710 MK II cassette deck receives an ADX-60 regular tape cassette, SAX-60 chrome cassette and MAR-60 metal tape cassette.

"With the Revox tape program, the consumer gets a complete package," said Revox director of marketing and sales Lawrence G. Jaffe. "For the first time, a manufacturer has put a program together that al-

lows the consumer to take the machine home and begin taping immediately."

Fuji Increases Package Variety

Following favorable response to recently introduced J-hook blister card packages for its audio and video cassettes, Fuji Photo Film U.S.A. Inc. has introduced two- and three-cassette "brick" packs.



'Brick packs' increase visibility.

The "brick" packs feature four formulations of Fuji audio cassettes in the C-90 length as well as VHS and Beta video cassettes. A shrink wrap around the audio cassettes provides product details. Boxes for the video cassettes are designed with red and green stripes to reinforce the Fuji brand name.

Fuji says the new packaging allows retailers to increase product visibility and generate impulse sales without committing large amounts of additional selling space. The packages also have been sized to reduce theft.

Sansui Sponsors Radio Awards

Sansui Electronics Corp. will be the sole sponsor of the 1983 Radio Awards to be aired on more than 250 radio stations in April. Winning performers are selected by consumer balloting that is now taking place exclusively at retail outlets featuring Sansui products.

The local stations that will air the program began promoting the balloting last month by urging consumers to go to the nearest Sansui dealer to vote for their favorites. In addition to the ballot box and ballots, participating Sansui dealers are being supplied posters, streamers, counter cards and ad materials for newspaper and radio use. A special incentive is provided for dealers who agree to run a "Rock Awards Week" featuring specially priced products.

Quadraphonics Again!

This time it's for video sound tracks, and it's a big improvement.

By **Ralph Hodges**
Technical Editor

When you manage to get out to a motion picture, you probably see pretty much what the rest of the movie-going public sees, but what you hear can be almost anything, depending on the film and where you experience it. At present, a theater may be offered a print of a major film in any one of three sound-track formats.

At the bottom of the heap is plain, unadorned mono, recorded in the form of an optical pattern at the edge of the picture, which is usually in 35mm format. The expensive way to go entails a 70mm print with magnetic striping that accommodates six separate tracks. Such prints wind up in the so-called showcase houses whose projectors are equipped with the appropriate magnetic sound heads, and which have multiple behind-screen and "surround" loudspeakers, to present what can be a virtual 360-degree sound field.

The middle ground, which services most cinema audiences, is occupied by what is called a Dolby SVA (stereo variable area) print. It is also optical, but the two photographic patterns running along the edge of the film amount to two stereo channels that contain, as appropriate,

different information. This sound track is encoded with Dolby A-type noise reduction, like the sound tracks for all "Dolby Stereo" films. But unlike the magnetic Dolby prints, which are intended for full A-type decoding and elaborate reproduction in showcase theatres, Dolby SVA prints have an inherent semi-compatibility intended to make them useful almost anywhere, from a lowly mono theater installation with a single antique speaker to a showcase theater that cannot get or does not choose to pay for a six-track magnetic print. And if the mix for the SVA print has been appropriately created and properly reproduced, the audible results can be just as arresting, and sometimes almost indistinguishable from, those given by a full-bore six-track magnetic print. In other words, there will be primary stereo information coming from left, center, right and perhaps from surround speakers located toward the rear of the auditorium, if the producer has elected to include a surround channel.

Two Channels Into Four

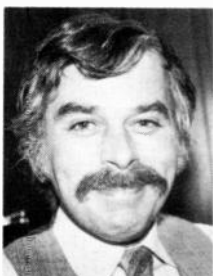
Here arises a question that is as old as four-channel stereo, if not older: How do the two channels of a Dolby SVA print become four in the theatre? And the answer is just as old: By a matrixing process, and one that has its roots in the four-channel era. However, the cinema does handle things a little differently from the old left-front, right-front, left-rear, right-rear formula that most of us remember so well. Since theaters require a central behind-screen loudspeaker to keep dialog seeming to come from screen center even for

audience members well off to the side, one of the four matrix-derived channels is dedicated to that. The dialog is recorded on the two film-print channels in phase and at equal levels (pure L&R mono, in other words), and the theatre's matrix decoder is adjusted to sort out that information, give it some dominance in level (actually, this is done when the sound track is encoded, but the dominance is still there) and route it to the center speaker.

Back At Home

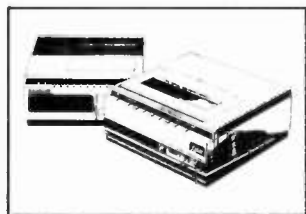
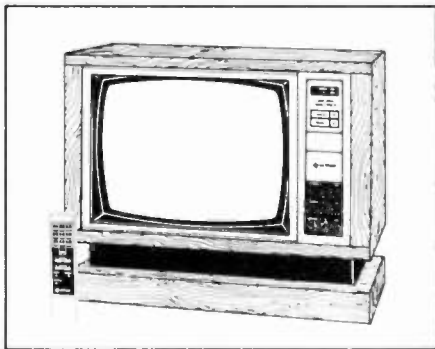
That leaves one channel for surround information, which is recorded out of phase between the two channels. The decoder detects this material and routes it to the rearward surround speakers, and everything becomes pretty much as it was when CBS was promoting the SQ system. In fact, the decoder used in current Dolby processors for motion picture theaters is an SQ decoder — the Tate configuration — with its decoding parameters somewhat modified for an L-C-R-S presentation rather than a four-corners-of-sound approach.

The point (excuse the delay in getting to it) is that the sound recorded on *stereo* feature-film video cassettes and video discs is, for all practical purposes, identical to that recorded on two-channel Dolby SVA prints exhibited in theatres. In many cases it is dubbed directly from such a print (with, one hopes, the appropriate Dolby A decoding and subsequent Dolby B encoding for video cassettes, and quite possibly CBS CX encoding for video discs). If there is surround information on the film, there is surround information



Before joining HFTN, Ralph Hodges spent 10 years as technical editor of Stereo Review and a brief time as communications manager for Dolby Labs.

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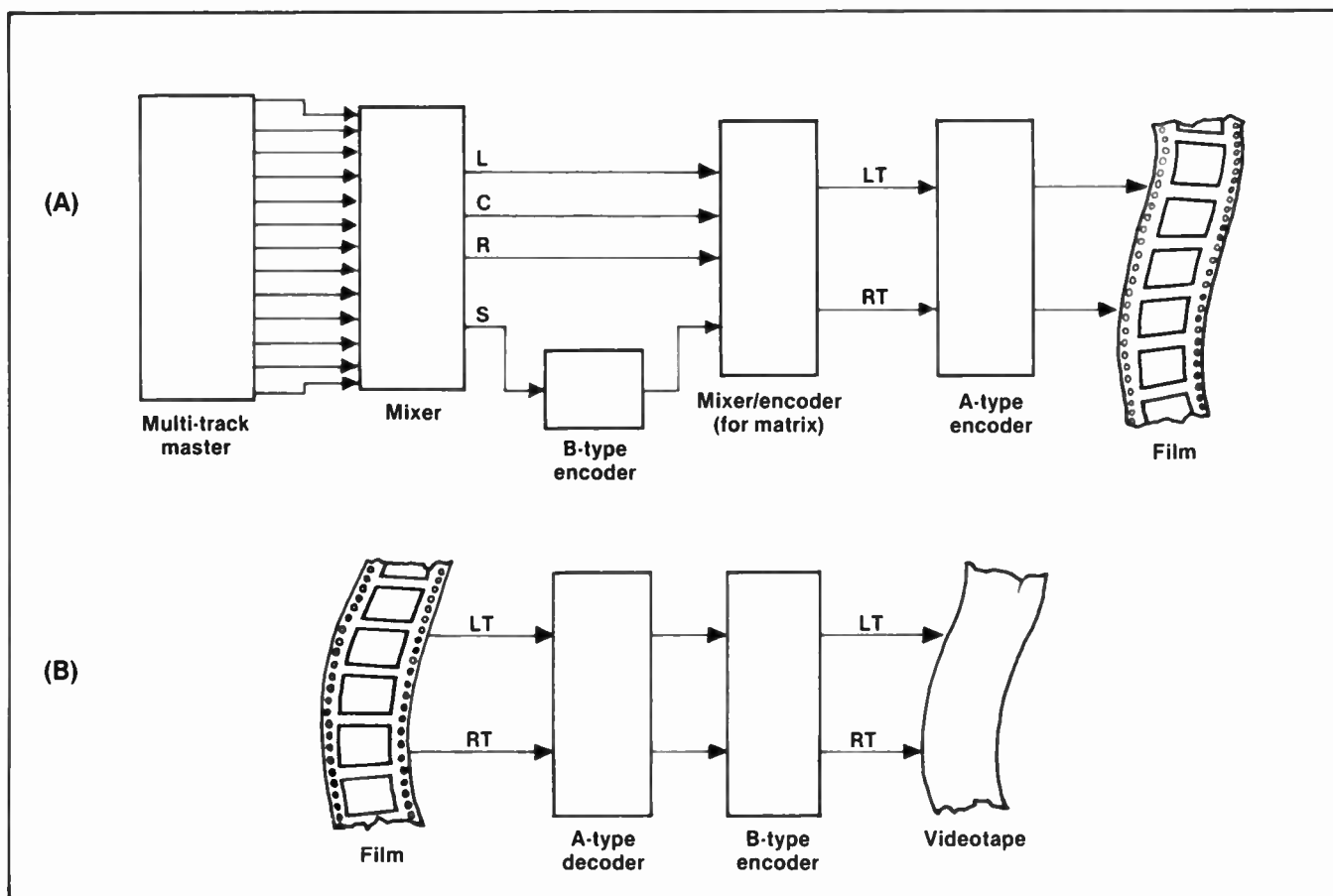


Figure 1: A much-simplified schematic for the evolution of a Dolby SVA sound track. In (A), B-type noise reduction is sneaked in early, and applied only to the surround channel, identified as S. In (B), the sound track is taken from the film (or equivalent), stripped of its A-type encoding and reprocessed with B-type. But even when the video tape's two tracks are properly B-type decoded, the surround information still has an overlay of B-type processing that, ideally, should get another decoding pass.

on its home-video counterpart, and it is just as accessible via virtually any four-channel matrix decoding scheme you'd care to use, including the venerable Hafler hook-up of difference-signal loudspeakers.

The significance of this will not be lost on those who visited the Fosgate, Jensen or Surround Sound Inc. demonstrations at the last WCES. These were nothing like the four-channel demos of yore, where people wandered around wondering which was front, which was rear and what was supposed to be happening anyway. These were grabbers, immediately communicating their appeal to the audience and enhancing the experience of a video-reproduced motion picture as perhaps nothing else could.

All these presentations involved a decoding device of some sort, four channels of audio amplification and the familiar four-corner quadrasonic speaker array (and of course, if the four speakers have to be smallish, a subwoofer can be

tucked away somewhere to great effect). They also, as far as I know, used off-the-shelf stereo software exclusively. The desirability of a fifth central speaker to maintain a "hard" center for dialog is being debated a bit at the moment, but most of those with experience in this medium seem to think such a speaker unessential. At least two rear speakers, even if they both reproduce the same information, are mandated, however. A single sound source calls distracting attention to itself, and does not encourage a "spread" of the sound field.

Two companies, Dolby Labs and Tate Audio, already are involved in licensing technology for surround decoding, and both were represented by a product at WCES. The Fosgate Model 101A (\$500) was the Tate exemplar (Jensen also demonstrated with the Tate System, but has not yet become a licensee), and it is said to incorporate the highest form of the logic-steered Tate four-channel decoder to date, yielding 35

dB of separation between channels even under worse-case conditions. Although Fosgate currently lays its emphasis on cinema decoding in an L-C-R-S configuration (center speaker is optional), the processor also can be switched into modes for decoding SQ material and for enhancing ordinary stereo recordings with a four-channel effect. Both of these modes drive the two rear channels with different information, so that the presentation becomes LF-RF-LR-RR. Both Tate and Fosgate suggest that the "stereo enhancement" switch position might prove more rewarding for many video sound tracks reproduced at home, and the claim doesn't seem unreasonable.

Surround Sound Inc. was the show's Dolby licensee, and as a requirement for being one, kept exactly to the Dolby regimen for reproducing surround information. Although an L-C-R-S format is not demanded strictly, SSI's M-360 (\$330) sticks to that exclusively. What

Dolby does insist on is (1) a master level control affecting all four "channels" simultaneously; (2) Dolby B-type decoding for the surround channel; and (3) a delay line for the surround channel. All these are present in the M-360, together with a 20-watt amplifier (mono) for the surround speakers. The matrix decoder itself is evidently a straight-forward one, not controlled by logic.

The reason Dolby wants to see a B-type decoder included in the package is that, according to the Dolby scheme for preparation of cinema sound tracks, the surround information comes encoded with B-type noise reduction and still retains a single overlay of B-type processing even when all the noise reduction has been properly decoded for the rest of the sound-track information. (See Figure 1.) This, Dolby believes, is a way of keeping the surround channel quiet in the theater, particularly when it has nothing much to do. Some people close to the film industry say that sound mixers often do not use the extra B-type encoding for the surround channel, and they could be right. But Dolby cinema processors for theaters assume that they do, and they decode accordingly. So will any processors intended for home use that are entitled to bear Dolby logos.

You Take It From Here

A delay line for the surround channel is used in theaters to keep people in the back of the auditorium from hearing the rear speakers before they hear the ones in front. Its application in homes is less obvious, since you can sit as close to the front speakers as you like, and Tate believes it's absolutely unnecessary. Dolby disagrees to the point of calling a delay line "essential." According to a Dolby spokesman, hands-on tests have shown most current VCRs and cassettes to be so imprecise in interchannel level and colinearity alignment as to cause matrix-decoding confusion and considerable leakage of dialog information into the surround channel. The delay line should keep dialog from cropping up in the rear or sides when the actor speaking is clearly at screen center. (Of course, future video cassettes recorded in the Beta Hi-Fi format should not suffer from this imprecision; what effect this will have on Dolby policy remains to be seen.)

Fosgate is based in Prescott, Az. SSI is distributed by Videonetwork in Glendale, Calif. I'm sure either one will be glad to arrange a demonstration if you haven't experienced one already. Or you can arrange your

own, with any four-channel matrix technology you happen to have lying around.

Dolby has already worked out a hierarchy of logos to identify video cassettes according to their appropriateness for surround decoding. The new Dolby MP designation means that legitimate surround information has been encoded, presumably with B-type noise reduction. The Dolby Stereo logo, previously reserved for motion pictures only, will indicate that the video cassette comes from a Dolby Stereo cinema release with its sound track intact. The matter of video discs em-

playing CX noise reduction is a little too complicated to get into here.

The potential of all this for additional amplifier, speaker and decoding hardware sales is obvious. Perhaps the potential for losing your shirt is also. But it may be best not to reflect on history as we view these developments. Some years ago, many people had four-channel sound thrust upon them, accepting it only because they feared being left in the technological lurch. However, today many people actively are seeking this experience, not necessarily this technology, and that makes quite a difference. □



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Room At The Top

High-end autosound today offers sophistication once found only in fine home systems.

By Norman Eisenberg

Autosound means, of course, stereo sound reproduced in cars, vans, RVs, trucks, boats — anything that moves. While almost any kind of sound system can provide some kind of joyful noise in a vehicle, a main thrust of today's sound-on-the-go equipment is to provide a listening experience far better than "make do," and it is this trend, the equipment being manufactured for it, the response by consumers to it and the proportionately higher profits that dealers can realize from it that define "high-end" autosound.

This idea is what is behind the proliferation of car stereo products with audio capabilities and sophistication once considered to be strictly for the serious home audiophile. These capabilities include high powered amplifiers, elaborate control panels, graphic equalizers, advanced noise-reduction systems, electronic crossovers for bi-amplified or even tri-amplified speaker systems, speakers themselves in woofer/tweeter or woofer/mid-range/tweeter designs, subwoofer and satellite systems and a growing awareness of how to utilize a vehicle's interior for improved bass and better mid-range and treble sound dispersion.

In "head units" there are improved FM front ends, an increasing

number of electronic digitally tuned receivers and auto-reverse cassette players with selectable EQ to handle chrome, chrome-equivalent and metal tapes in addition to the ferric-oxide tapes.

America's Listening Room

The net result of all this technical largesse is a phenomenon that has made "the car" what might be called America's new listening room. Actually, the interior acoustics of most vehicles turn out to be well suited for a super-stereo listening experience. Speakers installed up front — usually in the door panels — create the "headphone effect." Channel separation is perceived more clearly than in a normal-sized room, and this in turn creates the illusion of more space than otherwise would seem to exist in a vehicle.

Once this feeling is experienced, the next step can prove even more exciting to a listener — and that is to add rear speakers or convert the front pair to satellites for an added subwoofer. This kind of set-up adds ambience and a fullness to the sound that can be more dramatic than using surround speakers in a home system. In fact, some dealers report that they have sold more "extra speakers" and the associated equipment to go with them for vehicular sound systems than they

have sold for home stereo. The car stereo buff suddenly has become a better prospect for advanced electro-acoustics than even the seasoned home audiophile. And that is not because the car sound enthusiast necessarily understands audio more; rather it is because the audible benefits of these advanced techniques can be demonstrated to his or her satisfaction more readily and convincingly.

It is, in fact, this very power of demonstration that most high-end car audio people count on to sell their products, rather than on traditional "dealer incentives." Of course, many do offer rebates, haberdashery or even a trip to an exotic place as rewards for higher sales. There also are, of course, discounts for quantity orders. But this kind of dealer enticement is not what is emphasized by most high-end companies. What they do emphasize is the need for really good professional installation so that their products perform as claimed.

The demonstration and the installation, in fact, seem to be the two elements that high-end car audio people believe make up the key to successful sales, whether step-up or first-time.

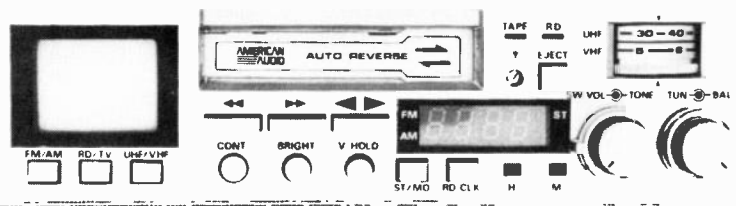
Following is a rundown of what's new and about to come from representative sources:

American Audio

Walter Semonoff, executive vice president of American Audio, said his company will introduce 20

the company introduced its in-dash Car Video system, featuring a two-inch TV, stereo and tape player for

Car Video



"brand new" models. "We've literally taken apart the line and are starting with the equivalent of a brand new group that reaches into the high-, medium- and low-end pricing."

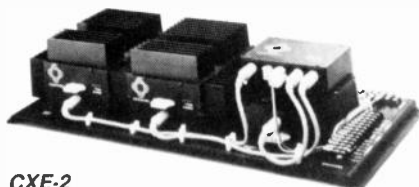
According to Semonoff, American Audio's plan is to "attack all segments of the retail market; from high-end dealers and car installation people to mass merchants." At CES,

\$1,495, and Sound-Off, a car stereo alarm system it plans to build into 80% of its line at no extra charge.

Promotions will be directed at the new line, but, at press time, plans had not been completed. Semonoff did indicate that retailers could expect a "buy X product at Y price" program. In addition, the company runs ongoing dealer rebates based on mutually agreed upon quotas.

AudioMobile

High-end "pre-packaged" systems consist of preamp, electronic crossover, fader and power amp fit into a rack. System AR-2 offers a to-



CXE-2

tal of 180 watts for driving two subwoofers and four satellite speakers (\$1,775.95). System AR-3 furnishes 240 watts for driving a similar array of speakers, with the option of powering one pair of satellites with 50 watts each and the other pair with 20 watts each. (\$2,084.95). System AR-4 supplies 340 watts for feeding two subwoofers at 100 watts each, two

satellites at 50 watts each, two more satellites at 20 watts each (\$2,299.95).

Other stereo power amps include the SA 450 (20 watts per channel, \$269.95); the SA-100 (50 watts per channel, \$519.95); the SA-2000 (100 watts per channel, \$719.95). Also offered are the SP-300 preamp (\$309.95), and the CXE-2 electronic crossover (\$244.95). The latter unit can be used for bi-amp systems or, if used with one of the rack systems, for tri-amplification.

AM's dealer incentive program makes one of its rack systems available at half dealer cost in two steps: one, when the installation is sold; and two, when it is finished and a photo is submitted to the manufacturer. Best photos with sources named will be used in promotional literature.

Boston Acoustics

At \$198 for a stereo pair, the Boston Acoustics speaker is obviously targeted for the middle-range or high-end customer. The speaker is a two-way model using a 5 1/4-inch woofer and a 1-inch dome tweeter with ferro-fluid protection. Both drivers are made by the company itself. DIN power handling capability is 50 watts. Suited for installation in front or rear or both locations in a vehicle, the speaker uses a 6-inch by 9-inch plate mount with a required depth of 1 1/2 inches.



MARCH 1983

ADS

The company that can take much of the credit for introducing high-performance mini-speakers back in 1974 now offers five high-end car speakers and a power amplifier, with two more power amps on the way. Flush-mount speaker systems include the 300I and the 320I. The 300I supplies a 5-inch woofer and 1-inch dome tweeter on a baffle. Power handling capability is 100 watts; price is \$270 per stereo pair. The 320I consists of a separate 5-inch woofer with very small tweeter (samaritan cobalt magnet) that can be mounted almost anywhere in the car for optimum stereo imaging. Cost is \$379 per stereo pair. Crossover networks come with each system.

Boxed speaker systems are the 200C (4-inch woofer and 1-inch dome tweeter; 50 watts power capability; \$269 per pair) and the 300C (5-inch woofer, same tweeter; 100 watts power capability, \$349 per stereo pair). Both of these systems have swivel brackets. ADS also has a subwoofer, the CS-400, which uses two 7-inch woofers (equivalent area to a 10-inch woofer) for mixed bass from both channels. The CS-400 may be bi-amped with a supplied active crossover, or used with a passive crossover. Two grilles allow for invert mounting. Recommended satellites are the 300I or 320I.

The Power Plate 100 is ADS' present power amplifier. Rated for 50 watts output per channel, it contains a built-in equalizer to optimize the response with different ADS speakers, although it can be used with other makes of speakers. Price is \$320. Amplifiers to come later this year are the P-80 (40 watts per channel, \$250), and the P-120 (60 watts per channel, \$350).

Blaupunkt

Flagship of the Blaupunkt line is the Berlin 8000, which boasts a remote-control head on a flexible mount. In addition to FM and broadcast AM, the tuning dial includes bands for longwave and shortwave AM. The auto-reverse cassette player has Dolby, tape EQ selector and automatic sound level adjustment. The set, whose controls are illuminated for ease of operation at night, furnishes a total of 80 watts (4 X 20) output. Price is \$1,395.

There are seven more Blaupunkt combinations of receiver and auto-reverse cassette deck, priced downward from \$469.95 to \$229.95, the top model being the CR-3001H with

HIGH FIDELITY TRADE NEWS 17

digital ETR and clock, and requiring an external power amp. A stereo radio only (no tape) is the "Frankurt" at \$149.95.

Power amplifiers include the BPA-430, 30 watts on each of four channels, \$319.95; the BPA-260, 60 watts on each of the two channels, \$319.95; the BPA-415, 15 watts on each of four channels, \$109.95.

Blaupunkt has dropped speakers but offers an extensive line of car antennas priced from its \$17.50 model up to \$131.70 for an automatic power unit.

Infinity

The idea of endowing car speakers with the same advanced technology that is found in home speakers is seen in all of Infinity's models. The Infinitesimal-3 remains top of the line. This two-way system in enclosure uses a 5-inch polypropylene woofer and the EMIT (electromagnetic induction) tweeter. Power handling capability is 100 watts, and a stereo pair retails for \$398. Mounting bracket is \$33.

Similar drivers on a frame with the same power rating are used in the I-CAR system, suitable for mounting in a 6-by-9 inch cutout. Price is about \$300 for a pair.

Slated for delivery by late April are four new speakers, all of which use the polypropylene woofer. The two top systems also have the EMIT tweeter, while the two lower-priced systems use polypropylene cone tweeters. Models are the A-63 (6-by-9, three-way, 80 watts), the A-53 (5 1/4-inch round, three-way, 60 watts), the A-52 (5 1/4-inch round, three-way, 60 watts), and the A-42 (4 1/4-inch round, two-way, 30 watts). Exact prices for the new speakers were not set at press time, but the spread will range from approximately \$80 per pair (for the A-42) to \$180 a pair (for the A-63).

Yamaha Jumps In

The latest addition to the car stereo market already is a familiar name to audio/video retailers.

Yamaha Electronics Corp. announced at the Winter CES that it plans to launch a line of car stereo products by mid-year. A spokesman for the company told *High Fidelity Trade News* that a "full car stereo line" would be unveiled for the press at a luncheon April 27, in preparation for its Summer CES debut in Chicago in June.

Bose

Bose has an updated version of its 1401 system. The new Series II, like the original version, includes four



speakers and a 100-watt booster/ equalizer (25 watts for each speaker). New features include a self-diagnosing protection circuit, remote on/off sensing for greater "stash-away" potential, a fool-proof connection system, a more flexible mounting assembly for the rear deck speakers and an all-black finish.

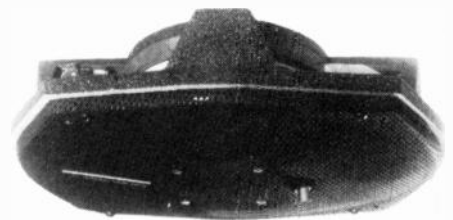
The remote feature of the booster/EQ lets this unit be activated when the radio/tape unit is turned on —

this in turn means the booster/EQ can be installed in out-of-the-way spots if desired. This unit also has high-level and low-level inputs for use with almost any radio or radio/tape source on the market. The 1401 Series II is priced at \$496. Bose's CRC digital tuner/cassette unit costs \$575.

Cerwin-Vega

Five speaker systems are offered, one of which comes with enclosure and mounting bracket. This is the new HED DC-5, which uses a 5-inch woofer and horn high-frequency driver inside a die-cast aluminum enclosure. Impedance is 8 ohms and efficiency is high (90 dB for 1 watt/meter). Dispersion of 60 degrees is claimed. The system includes a resettable circuit-breaker and high-frequency contour switch. Power handling capacity ranges from very low (2 watts) to very high (600 watts when used with a subwoofer). Retail price is \$135 each.

Of the four unmounted systems, the model being promoted most vigorously is the CS-18A, a 6-by-9 inch two-way reproducer with circuit-breaker and power rating of 150 watts.



CS-18A



CS-17

Philips AutoAudio

In June, Philips AutoAudio Norlco Car Stereo Division should introduce an in-dash radio that will retail for \$599. The AC-825 features remote monitoring of signal strength and frequency display, which, according to product manager Ken La

Marca, makes the product ideal for limousine installation. "We can't knock heads with the Japanese on price, so we're trying to come out with a product that a dealer can still make money on," he explained.

Linear Power

Scheduled for May delivery is the model 2120 (\$699.95), which combines an active (electronic) crossover with power amplification for



X01

subwoofer (120 watts) and a pair of satellite speakers (60 watts each). The crossover frequency is switchable, and a second 2120 can be teamed up for tri-amp systems. Other amps include the 2601, a lower-powered similar-functioning unit; the model 300 (150 watts per channel, \$699.95), the 1501 (75 watts per channel, \$429.95); the 901 (45 watts per channel, \$279.95); the 601 (30 watts per channel, \$199.95) and the 401 (20 watts per channel, \$149.95).

Other electronic units are the XO-1 (\$139.95), an active crossover (replacement chips can change the crossover frequency) and the EQ-1, a preamplifier with built-in six-band graphic equalizer (\$199.95).



Bass Vent BV-1

LP's subwoofer is the model Bass Vent BV-1 (\$199.95), two 8-inch woofers facing each other in an enclosure designed for venting via an opening on the rear deck.

Dealer incentives are sport coats (one a "sailing jacket" type, the other a baseball type), which can be won or bought from LP at cost for resale to customers.

Nakamichi

Nakamichi's entry into high-end car stereo consists of three components. Head unit is the TD-1200 tuner/cassette deck with ETR and auto-reverse (\$1,260). Operating controls are on the in-dash section; additional circuitry is separately

Power amp is the model PA-300 (\$340) with specs comparable to high quality home amps (eg., 70 watts per channel with no more than 0.005% distortion into 4-ohm loads). Speaker system is the SP-400 (\$390 a stereo pair), a three-way reprodu-

Mobile Sound System



housed. Highlights include the Nakamichi Auto Azimuth Correction System, whereby the playback head is aligned automatically for best response on every tape in both directions; Dolby B and Dolby C; EQ for all tapes; three-band tone control; four preamp outputs with left/right and front/rear controls.

cer with drivers mounted on baffle-mounted drivers — 5¼-inch woofer, 1½-inch soft-dome mid-range, 1-inch soft dome tweeter — and 80-watt power handling capability.

While Nakamichi naturally would prefer to sell the entire line-up as a system (\$1,990), the three components interface with other brands.

Rockford Fosgate

The newest entry into the high-end, high-powered class is the Power 6 amplifier. It may be used to provide 75 watts on each of four channels, or its total 300 watts can be apportioned for bi-amping on two channels. Claimed to remain stable with loads down to 2 ohms, it retails for \$680. The Power 2 amp provides 75 watts on each of two channels; price is \$425. Previous amps (Punch 100, 50 watts per channel, and Punch 40, 20 watts per channel) continue in the line. With built-in EQ,

these two require no preamps. For use with the new Power 2 or 6, or with other makes of power amps, there are three preamps: the 250 (\$125); the model Z (\$320); the model ZX (\$480). The top model, the ZX, includes a 5-band graphic equalizer, plus dbx noise reduction using a circuit board rather than the lower-priced chip. On special order, the company will supply a 10-band octave equalizer, priced in the \$200-\$250 range. □

Lock Protects Car Stereo

Melody Burbank got the idea for a car stereo lock when her own car stereo was stolen in broad daylight. "I knew we should be able to come up with something that would be able to protect the car stereo without having to go to the expense of a complete car alarm system," said the president of Burbank Enterprises Inc.

The result was Audio-Safe, a car stereo lock that consists of a base and a cover that lock together to enclose the car stereo and stereo mounting nuts. Securing the mounting nuts is essential, she

explained, because they usually are the only things holding the stereo unit in the dash and they easily are unfastened.

Audio-Safe completely hides the stereo from view and is removed quickly with a key. No sophisticated electronics are required, although the designers say that, with an alarm system, it provides complete auto security.

Burbank said the company plans to introduce new Audio-Safe models in the near future.

Circle No. 150 on Reader Service Card

Mid-Range Movers

Popular-priced receivers, cassette decks and speakers are offering better value than ever before.

By Marcia Golden

Chasing the elusive consumer autosound dollar up and down the price spectrum, many suppliers have decided to fill the days between CES shows knocking out new products to give their lines a "well rounded" look.

Alpine

Mid- and higher-priced systems still comprise most of Alpine's offerings, but at least one relatively low-priced FM/AM cassette deck is among the new items offered. This



one is the model 7150 (dial tuning, 6 watts per channel, auto-reverse deck with metal capability); price, \$159.95.

Two higher-priced models are the 7152 and 7151, the former with Dolby. Prices are \$269.95 and \$199.95, respectively. Both have auto-reverse as well as bi-level capability, which allows the user to add a variety of Alpine components via a DIN jack connector that adjusts output level to meet the required input of the added component. ETR (digital) tuning, dbx, Dolby B and Dolby C are found in the model 7347 offered as a "state of the art" or "spec performance" unit, loaded with features and intended for use with external amplification. Price is \$599.95.

Alpine also is introducing six new speaker systems designed especially for lighter, smaller cars. Prices range from \$49.95 to \$119.95. All use

strontium magnets and are two-way systems. A new three-way system is the 6391 with 100-watt power handling capability; price is \$149.95.

AFS/Kricket

AFS/Kricket will not debut new products this spring, but it is running plenty of promotions. "The largest, which we're doing with General Cinema, is a dealer co-op program," said Mick Burk, new product marketing manager. "If a consumer goes to a store and listens to a set of our speakers, he or she receives a pair of movie passes good for a certain movie or at a certain General Cinema theater. In addition, the theater promotes our speakers. Sometimes they'll have an AFS/Kricket night at the movies and give away speakers. It's built up traffic and the close rate has been phenomenal," he reported.

Altec Lansing

Prototypes of two 5¼-inch speakers received enough favorable response at WCES to encourage A-L to add them to its "Voice of the Highway" line this spring. One is a full-range, thin-mount model expected to list for about \$79. The other is a dual-cone model listing at around \$89. Both will mount into a ¾-inch depth.

In general, A-L advises that the company intends to go more aggressively after the middle bracket of high-end autosound, also pointing out very high levels of dealer and consumer acceptance of product offered to date.

ARA Motorola

ARA Motorola's Bill Marcom, vice president of marketing, says ARA has introduced four products, two for installation in Ford Motor cars, vans and pickup trucks and two for General Motors' J-body line. Later this year, there will be products for Chrysler cars. With most of the company's business tied up with auto dealers, ARA has no real promotion plans for spring.

Audiovox

Audiovox is shipping its new line of electronically tuned radios and an assortment of power boosters. John Olney, vice president of marketing and advertising, said his company appears to be moving toward "miniaturization — high-powered miniaturization."

At the dealer level, the company will resume some of its trade advertising, which Olney indicated is only the prelude to the consumer promotions, which could be on line by mid-year.

Boman

Boman is adapting its Carerra line of auto electronics to appeal to the mid- to high-end buyer, and probably will introduce a different line to go to mass merchants, said Michael Lee, national director of marketing and sales.

New to the Carerra line are: the CR-30-35, a leader auto-reverse cassette deck (list \$154.95); the CR-40-45 cassette deck, no auto reverse, which features a "Ride Man" set of

headphones in the package (\$179.95), and the CR-60-65, a push-button, 10-station pre-set system (\$249.95).

In June, look for the CR-70-75, an electronically tuned receiver with 12 station pre-sets, DNR, 20 watts per side, pre-amp out jacks and separate bass and treble controls for \$299.95. "We're trying to move out in other directions," Lee explained, noting the introduction of a new speaker line, as well as plans to package complete car stereo systems.

Current promotion plans rest on monthly price specials highlighting one or two new products, plus standard programs based on a dealer's net sales. A new program will debut in June.

Clarion

Clarion's extensive line covers the price spectrum from \$100 to \$400. The top unit is the 9300TB AM/FM stereo cassette/tuner. This Mark II version of the 9300T has an all-black face for a "sleek, sophisticated look." Among the 15 additional cassette/receivers is a step-up 5900R



5900R

(\$399), which, with its front-to-rear depth of only 147mm, is said to be smaller than most major competitive mini-chassis but with no loss in features (electronic tuning, 5 AM and 5 FM station pre-sets, scan, muting, keyed AGC, auto reverse, metal (70 μ sec) EQ, four-way balance controls, separate treble and bass controls, digital clock and maximum power output of 6 watts per channel.

Clarion also offers the specialty speaker line (four models) and the standard line (10 models); three separate amplifiers; three equalizer-boosters, the newest being the 200EQB2 with 25 watts per channel and seven-band graphic EQ, dynamic noise reduction, front-rear fader and LED power indicators for \$139.

Dealer incentives are built around two plans. One assigns dollar value per point, with different points assigned to products. Another promotion involves product quotas for dealers, which, if exceeded, allow dealers to earn rebates on volume purchases.

Dynamic Acoustics

A relatively new name in the auto-sound field is Dynamic Acoustics, although the firm has been around for some four years manufacturing OEM components. Its newest entry into the speaker field under its own name is scheduled to debut next month. Called the DCM-2, it is a 4 $\frac{3}{4}$ -inch by 7 $\frac{3}{4}$ -inch thinmount speaker with a 1-inch silk dome tweeter and a 4-inch polypropylene midrange that will retail for \$119.50 to \$129.50 for the pair. Although the new speaker can be used alone, it is ideal for use as a satellite with any of the company's woofers, according to DA president Gregory Calo. A detailed booklet supplied with the speaker shows how to modify it for more exotic applications using company-supplied materials.

Calo said Design Acoustics, which is currently distributed in 15 Western and Southern states, is actively looking to extend distribution on both a dealer and distributor level. The firm offers advanced autosound seminars to dealers, and is planning to publish in the next few weeks a "very advanced book on car stereo."

Fujitsu Ten

While still offering high-priced car stereo, this company is making a definite bid for the mid-priced mar-

ket as well with several radio/cassette combinations. Electronic tuning is featured in the CE-4432 (said to fit virtually any car on the market) at a list price of \$299.95, while a former ETR model, the CE-4431, has come down from \$279.95 to \$259.95.

The top model with dial tuning is the CR-1130/1134, which has 25 watt-per-channel output (\$319.95), while the CR 1033/1031 (\$289.95) and the CR 1030/1032 (\$249.95) provide 4.5 watts per channel. All of these, as well as the CM-6530 and CM-6430, have auto-reverse cassette players while the radio sections boast many features and circuit developments found in costlier sets.

Top of the line remains the Mini-Wizard (CE 4130 or CE 4133), which is now available alone for \$659.95. With companion amplifier, model QM-104, cost comes to \$799.95. However, there also is a new KW-1018 adapter cord that lets either Mini-Wizard operate with just about any other amplifier on the market. The new adapter cord (\$24.95) also permits the Mini-Wizard to be bi-amplified. Also available is the QR-101 remote control (\$50). Computerized functions include automatic tuner operation to desired station at a pre-set time.

Among this company's dealer incentive plans are trips based on points earned for selling in-dash units; special discounts (ranging from "greatly reduced prices" to "no charge") for salespersons.

Survey Rates Car Stereo

Car audio advertising to consumers may be less productive in establishing brand awareness than word-of-mouth, according to a consumer survey conducted by an independent market research firm commissioned by Jensen Car Audio.

Although Jensen said it was not surprising that word-of-mouth communication is a factor in brand awareness and perception of quality, the amount of its influence was, particularly regarding speakers.

Jensen commissioned the survey to stay in touch with its traditional core car audio buying group, the under-30 market. It selected Chicago Fest, a music festival held last August, as a testing ground because researchers believed it would be the best place to find a concentrated group of people of the target age group who were concerned with good music and its

reproduction in the home and car.

The survey, which included 30-minute interviews with more than 600 people, revealed that Jensen scored number one in brand awareness of car stereo speakers and in terms of how consumers rated the sound of individual car stereos. Jensen car speakers were rated as excellent by a wide margin over the second-place brand.

Jensen Car Audio also scored high when consumers were asked about brand awareness of car stereo electronics, which company spokesmen said was gratifying, considering that the firm only has been active in electronics since 1978.

In addition, the survey found that significant percentages of consumers believe frequency response, the type of speakers, number of speakers and power handling are "very important" in the buying decision.

Jensen

To commemorate its 50th anniversary, Jensen has introduced its new top-of-the-line model RE-530 (\$499.95), described as a receiver/cassette unit that has "every feature that can be put into such a product." Among them: digital ETR and clock, a special mixer circuit, which, together with auto program control, couples and adjusts the received signal for optimum reception constantly; auto-reverse cassette player with Dolby and DRN; and 5 watt-per-channel output.

Among lower priced models is the R-408 (\$289.95), which has many of the RE-530's features, including ETR with pre-sets and EQ for all tapes and 5 watt-per-channel output. A new graphic/equalizer, the model EQA-5000 (\$139.95) offers 18 dB of boost and 6 dB of cut on seven frequency centers with rated power output of 15 watts per channel. The A-35 is a separate power amp with both high and low level inputs, delivering 15 watts per channel for \$74.95.

Jensen also has five new speakers, led by the thin-mount Triax, 4 by 10 inches with internal three-way crossover and 45 watts power-handling capability, \$129.95 per pair. A thin-mount coaxial (4 by 10 inches) goes for \$84.95 per pair. There also are two separate woofers, a 6½-inch model at \$44.95, and an 8-inch unit at \$59.95. Finally, there's the Dual-Cone, 4 by 6 inches at \$37.95 per pair.

A new product category for Jensen Car Audio is its line of accessories, which, so far, includes the JA10, an in-line, 5-amp alternator whine suppressor (\$12.95); the JA20, a 10-amp L/C circuit engine noise suppressor (\$22.95); the JA30 (\$32.95), a dual-function combination 5 and 10 amp L/C circuit engine noise suppressor (it also may be coupled for single 15-amp use); and two adapter kits — the JA40, which adapts late model GM vehicles to accept standard and universal size in-dash units (\$22.95); and the JA50, which adapts most 5-by-7 and 6-by-8 rear-deck speaker openings to accept the popular 6-by-9 speakers (\$22.95).

JBL

The model T-425 is James B. Lansing Sound's newest mount-anywhere speaker. A 6½-inch round, three-way reproducer, it handles up to 75 watts of power and is priced at \$179.95 for a stereo pair. Other premium "T" series speakers include

the T-545 (6-by-9 inch, three way, 100 watts, \$179.95 the pair); T-540 (6-by-9 inch, two-way, 100 watts, \$149.95 a pair); T-420 (6½-inch, two-way, 75 watts, \$119.95 a pair); and T-205 (4½-inch, two-way, 50 watts, \$99.95 a pair).

Offered as replacement speakers for installing into pre-cut openings made for factory systems are the T 105 (3½-inch, 15 watts, \$29.95 a pair); and the T 115 (4-by-6, 15 watts, \$39.95 a pair).

About to come on the market is the LT-1 in its own metal enclosure with mounting bracket. The LT-1 uses a 5¼-inch woofer teamed with the same 1-inch dome tweeter found in many of JBL's home systems. Power handling capability is 50 watts; price is \$249.95 a pair.

Mitsubishi

Mike Hyde, general manager of Mitsubishi's autosound division, said his company introduced four new items in January, but plans to introduce three more in June. Through March 31, the company is offering a number of "free with the purchase of" type packages.

Marantz

Marantz expands its Black Gold series for car systems with four new stereo speakers. Top of the line is the MZS 412, two-way system using a 4-by-10 inch woofer with a 2-inch piezoelectric tweeter; 90 watts power handling; 4 ohms. Price is \$90 per pair. One step down is the MZS-420, a 4-inch, two-way speaker; 50 watts power capability, priced at \$60 per pair.

The model MZS-350 is a slim-mount, two-way speaker with a 20-watt power handling capability and a price tag of \$44 per pair. Finally, there's the MZS 410, a 4-inch, one-way system with a 20-watt power capability; price is \$40 per pair.

Panasonic

Panasonic's Auto Products Division is introducing 10 new products for spring, including cassette decks, speakers and equalizers, at its national sales meeting this month. National sales manager Ron Berger said the highlight of the lines is a series of four graphic equalizers expected to retail between \$300 and \$500. These products, and an as-yet-to-be-announced retailer promotion package, are expected "to broaden the price point that our retailers can

sell at. Plus," Berger added, "we'll be bringing them (new products) out month by month during the course of the second half of the year."

Pioneer

Pioneer is introducing a total of 103 new products this spring, from home audio to car stereo, so retailers can look for a totally new auto-sound line, according to Bill Mattheis, senior vice president, marketing. Mum's the word on specifics, however, but you can bet that many of the front ends will incorporate Pioneer's new Supertuner III technology introduced at the Winter CES.

In the meantime, Pioneer will help out at the World 600 auto race in Charlotte, N.C., this spring. Leading up to the NASCAR event, Pioneer will conduct "Sound Wars" competitions in North and South Carolina, Georgia and possibly Virginia. Local dealers will judge consumer car stereo systems, which must include at least 50% Pioneer products, for the best sound. Finalists in the sound contest will be brought to Charlotte, and the winner will be announced at the track and honored at a barbecue. Grand prize is a truck with a Pioneer sound system.

Polk Audio

Polk Audio is introducing four loudspeakers for automotive, boat and other mobile installations, which it says were engineered specifically to achieve the same level of sonic performance as the Polk home speaker systems. The Polk Audio Mobile Monitor Series consists of the MM I, III, IV and V, all sonically and functionally compatible with each other so that they can be used individually or in any combination. All are designed for flush-mount installation.

The top of the line, the MM V, consists of three separate units per channel: a ¾-inch ferro-fluid damped, polymer dome, high-frequency radiator; a cast-magnesium basket, 5 ¼-inch, high-definition bass/mid-range driver featuring a polymer-impregnated nylon cone, and a complex 12 dB/octave crossover network. This configuration, according to Polk, allows optimum placement of each driver in the automotive environment for perfect balance and imaging.

The line extends to the MM I, a polymer-treated, full range, 4-inch system, which can be located in the door or kick panels of a car. Suggested list prices range from \$129.95 each for the MM V to \$34.95 each for the MM I. □

The Agency Or In-house Route?

One way offers the retailer creativity and objectivity, the other, flexibility and quick turnaround.

By Deborah Merck

Creating a public image is like building any structure. If the construction is to permit function, its form must be utilitarian. For the retailer, a utilitarian form translates primarily into advertising building blocks that make the public aware of the dealer and that give the consumer an idea of what kind of foundation that dealer rests on. It is impossible to divorce image from advertising because advertising is one of the features that brings contour to the surface of an otherwise uncreased, vacant business face.

Two Approaches To Advertising

There are basically two recommended ways to approach advertising: you can buy the expertise of an agency or you can hire creative talent to work strictly for you as an in-house agency. But whatever you do, if you have no advertising experience, hire someone who does. Advertising without the benefit of some expertise is not recommended by either dealers with in-house staffers or agency representatives. Sometimes hiring an agency can help the unexperienced learn without suffering the losses incurred in many trial-and-error maneuvers.

Advertising is so critical to the success of the audio/video dealer, because of the highly competitive nature of the industry, that even in smaller communities it is often difficult for one shop to corner the market. Simply retaining a portion of the pie means constant public exposure.

"Few individual dealers have the time and ability to do what has to be done," says Rick Deutsch, vice president of advertising and marketing for Boston's Tech Hifi, a chain of 82 retail electronic stores located primarily in the Northeast. "Unless you're an aggressive advertiser, no one comes to your stores, especially in a recession. People look to the media to know where the best buys are."

Capitalizing on the public's reliance on the media is what a good advertising campaign does. When it comes to selecting an agency or going the in-house route, the advertising experts say, for the most part, that it matters not whether your business caters to the high-end or low-end of the market. However, there are some cases where a high-end retailer needs the sophistication only a well staffed agency workshop can offer.

In-House Advantages

The advantages of using an in-house staff as opposed to an agency are numerous. First, just spearheading the problems inherent in the mechanical end of the business is easier for an in-house agency, say some experts who've had exposure to both.

"In this kind of advertising there are a lot of last-minute changes, so it's difficult for an outside agency to make money off of us because of all the time spent on those changes," explains Deutsch, who heads a team of seven in-house staffers at Tech

Hifi. "It's hard to find an agency who is responsive enough to make those last minute changes."

Frank Karnauskas, vice president of marketing services for Team Central, agrees. "The turnaround time with an agency is too long but manufacturers make changes overnight. The agencies will sit down and listen to you but they can't do those quick turnarounds, and that's important to us because we're in 80 markets."

The changeover from use of an agency to a total in-house staff came about at Team Central more than four years ago. At that time the chain of franchises had a small in-house staff to do an annual catalog and the rest was done by an agency. With the use of both there was a duplicity of effort and a morale problem in-house because the agency got all the glory.

"It was difficult to find a good retail agency. There are many good agencies in town from the standpoint of an all-inclusive package, but not many really knew retail. It was especially hard to find someone experienced in audio/video. Typically, the better ones for us were larger. Yet we weren't satisfied that we were getting priority service from a marketing standpoint. Again, large agencies just don't do things at breakneck speed."

Besides allowing quick turnarounds, in-house advertising staffs also result in a marketing advantage. "We know our market better than anyone else," Deutsch explained. "An agency will not know

our customers as we do. Also, the ongoing market research we can do in-house would be prohibitive in cost if an agency did it. But we do it all the time as a matter of course." In addition, with in-house talent, "you pick the right kind of talent for your needs," adds Deutsch, "Creative groups in ad agencies are less likely to be focused on your particular needs."

Cost Vs. Benefits

Ultimately, the question arises: How much will it cost? Is an in-house agency less expensive? The response varies.

"By going in-house, we're not able to do what we were doing before any cheaper," says Karnauskas, who has a staff of nine. "But for the same expense, we're able to produce additional materials like point-of-purchase material. And we're getting what we need."

Team Central provides materials for its franchise dealers such as flyers, camera-ready newspaper ads, pre-recorded radio and TV ads and outdoor artwork. A media planner prepares an annual media plan for each retailer, tailored to that retailer's market. Each plan is negotiated so that the individual retailer has confidence that this plan will work in the designated market.

At Tech Hifi, Deutsch says that even though the agency commission is saved, the cost to Tech is about the same with an agency. But Mark Neiger, advertising manager for Schaak, a chain of 50 Midwestern electronic stores, says his staff of eight costs him less than an agency would.

For the individual dealer, however, who can't justify the cost of a staff with the diversified range of expertise a chain can afford, it is necessary to look at a number of possibilities.

A small budget may call for creative talent that can be hired on a free-lance basis for an hourly fee or by the job. The market determines the fee range. Or an in-house person can be employed for between \$15,000 to \$50,000 annually, depending on skill, experience and market demands.

The most obvious approach is to use an advertising agency. It can be used on a full-time or part-time basis, or in combination with creative free-lance work. Generally, agencies get a 15% commission, which can be either above the cost of the media placed or included in it. Most radio and TV ads are agency commissionable, which means the commission is built into the cost of the ad, so the cost is the same to the re-

tailer, whether he uses an agency or not. But with newspapers, rates are not necessarily agency commissionable. Retailers always should check with the individual media first to know exactly for what they are paying.

Often, strictly public relations image-building, as part of an overall advertising strategy, is conducted on an hourly basis for as little as \$25 an hour, although the fee is usually more. Some advertising promotion campaigns are negotiable as a flat fee project.

Although some advertising agencies say that no retail ad budget is too small to be a welcome addition to agency coffers, the qualifying statement that follows is "where there is growth potential." However, according to Raymond Trapp, president of Keller Crescent Southwest in Dallas, "A small operation will gladly take on a \$100,000 ad budget. That means \$15,000 a year for them. Whereas, we have a staff of 35 and we can't take on anything less than a \$300,000 a year budget."

"More frequently ad agencies negotiate up front their prices because media commissions are becoming less and less since independent dealers don't generate enough advertising for the agency to take a percentage of it," says Karnauskas.

"In an independent shop an in-house person can be very cost effective if a person can be found who is a jack-of-all-trades," he said. "If it's only radio and newspaper, in-house can be very effective since those are the primary outlets we in the industry use. But if it's exotic, like TV, an in-house person probably can't handle it," he added.

Hi-Fi Buys found that a combination of in-house for print ads and agency for broadcast media was the best mix for its chain of stores that spans four Midwestern states.

According to Bruce Munson of the Pearson Group in Indianapolis, the agency and client grew together. "We do quick radio turnarounds," he said. "This approach sprang up as Hi-Fi Buys did. One developed as the other developed. I can't understand how a conventional ad agency could handle an account like Hi-Fi Buys."

Advantage Of An Agency

"An agency has two things it can offer that are often found lacking in small in-house staffs — creativity and objectivity," says Trapp. "If you're advertising sale items only, use an in-house agency, it's cheaper. But if you want image, positioning or major promotions where creativity is needed, you need an agency. What a retailer wants to buy from an agency is what he can't afford to carry in-house.

"The problem with in-house agencies is that they lack objectivity. A staff person becomes afraid to challenge management and afraid he'll lose his job if he suggests something new, so the advertising gets to be predictable."

"In a small business you can be so close to it that you need a third party, otherwise you might miss your real market," says Jane Shivers, president of Shivers Communications in Atlanta.

Even though Team Electronics and Tech Hifi have in-house agencies, both firms' ad directors recognize how difficult it is for creative talent to remain fresh. "There's a

The Advertising Game

Go the in-house route:

1. If your ads require quick turnaround.
2. If you want market research for less.
3. If you use only simple ads.
4. If you use available (free) resources, such as newspaper artwork and radio reps for radio copy.
5. If you use a lot of co-op.
6. If you use less sophisticated media vehicles.
7. To tailor the talent to your needs.

Go the agency route if:

1. You need constant fresh ideas and objectivity.
2. You need sophisticated ad campaigns.
3. You need sophisticated image building.
4. You need to use diverse media such as radio and TV.
5. You're too inexperienced to hire in-house talent.

How To Choose An Agency

1. Evaluate each agency in light of your needs — such as quick turn-around — and ambitions.
2. Take the time to interview each agency.
3. Make sure their ideas fall within your predetermined budget.
4. Look for other ads, find out who did them and seek out that agency.
5. Be wary of cheap and fast agencies.
6. Check out the agency's reputation.

tendency to look backward and try to repeat what you did 12 months ago," says Deutsch.

Karnauskas agrees, "We need to keep fresh stimulus in front of our people all the time, whereas an agency will give you fresh input because their staff of 20 will be working on different things all the time."

Yet another problem in-house agencies have to cope with is, "everybody wants something right away," says Neiger, "and we're not so diversified that it's easy for us to do that, so we have to prioritize them, according to deadlines. It takes a lot of control."

The retailer also should be aware of existing practices, whether they go the in-house route or agency route. "Certain radio stations will try to use unscrupulous tactics, like offering the media buyer free vacations. So the person you pick to do that requires close monitoring," says Deutsch.

Set Up A Plan

Though picking good, creative, trustworthy talent is critical to the success of any advertisement, in-house and agency proponents alike say that where retailers traditionally fall down is not as much in their creativity as in planning. Retailers, even if they use a media service, should initiate and participate in the ad planning process, observers say.

"A dealer should begin with a business plan," advises Karnauskas. "He should know exactly how much he wants to make in profits over a year. He should calculate how much product he wants to sell and figure out how many customers it takes to buy each product category. Then get a media buying service to reach those people and find out how much it costs to reach them. Look at how much it costs per promotion. Look at the promo budget in relation to the calendar. Then restrict or increase the size of the ad, depending on the initial response, and run the promos as close together as it takes to reach that established number of customers enough times to meet revenue projections."

A retailer can do this in-house as well, but all the information to be compiled will be time consuming. Sometimes the skills of a media buyer will suffice for the planning process, and its execution can be carried through by creative talent hired on a free-lance basis.

While Deutsch says his advertising budget, which was \$9 million last year, is 6% of projected sales, Team Central's ad director says using a percentage of sales projections to determine your ad budget is not always a good gauge. "If the store is doing poorly," he points out, "that percentage won't reflect the percentage needed to increase sales. That only works if a store is selling up to its maximum. A percentage can trap an owner. He can overspend and waste money, or worse, underspend and end up with nothing."

Retailers not only fail to set up business plans and budgets for advertising, they often overlook a number of advertising services that will cost them nothing and enable them to do more in-house. First, newspapers build ad production and artwork costs into pricing. Secondly, in small markets, radio reps often consider it their responsibility to write copy for the advertiser.

Tips On Co-op

Another type of advertising that appears to be a bargain — one seemingly easy to execute by in-house people — is co-op. "Agencies find it more difficult to work with co-op advertising," says Deutsch, who has one person spending 50% of his time following up on co-op money. The truth is co-op funding is difficult for everyone, even those with the wherewithal to hire people to deal with it. Small retailers never get the opportunity to take advantage of the available advertising help because the media doesn't provide the appropriate documentation, or they miss the co-op deadline.

To help avoid these problems, Team Central's in-house agency added to its insertion order a clause

stating that billing must be provided within 30 days of ad placement and that the company will pay only if the documentation is received in time to meet co-op deadlines. Karnauskas warns that this doesn't always work in small markets where one newspaper, for instance, is the only place to advertise, but it does create an awareness of the problem anyway. Whether co-op is handled in-house or by an agency, all parties should be advised of potential snags in the usage of it.

Choosing An Agency

The relationship between the agency and retailer is "like a marriage," says Trapp. "If a retailer needs an agency that can offer quick turnaround time, that dealer needs to make that clear in advance.

"But the dealer needs a clear set of disciplined steps set up. I see many retailers with no base, no plan, no budget. It's the dealer's obligation to set up some discipline. Then the retailer can interview agencies — four or five of them if need be. It costs nothing but time, but the retailers will learn a lot in the process.

"I've seen a lot of retailers buy fast, cheap work and then say the agency failed them. If you buy cheap and fast work," he warns, "expect it to look cheap and fast."

"Choose an agency with advertising and public relations capabilities," advises Shivers. "You may think you're too little but if you think that way you'll always be little. Perception is the whole deal in advertising."

Although each retailer must look at his own budget and an agency's reputation when choosing an agency for the company's needs, Munson advises retailers to trust their instincts about creativity. "See what you like, find out who did it and go to that agency.

"When the results come in, ask yourself: Am I paying for something I could do myself? Could the creativity that exists here exist in-house?"

Whether a dealer finds the most value in an in-house agency or a traditional advertising agency, the dealer should be aware that both routes exist for a reason — to satisfy different needs. It may take some time to find the best route, but Karnauskas advises the retailer not to transfer responsibility for his part of the job.

Planning is paramount. "I've seen the best ideas that were so pregnant with possibilities flop for lack of good execution. And I've seen mediocre ideas succeed because they were simple and well executed. Stick to the simple!" □

The Mechanics Of Image Making

Times have changed, and attracting today's sophisticated shopper calls for well planned advertising strategies.

By Stephen Wahrhaftig

Whether a retailer uses an agency or produces his own advertising, he's faced with some tough decisions that must be made before he signs a single payment voucher. Where should he advertise? How often? What does he want to say? How does he say it?

The right kind of advertising repays the retailer many times over. The wrong decision could cost thousands of dollars. A successful ad makes the most of your advertising dollars. Its goal is both to bring customers into your store and create an image of you and what you offer to the buyer.

The simplest form of advertising centers on price promotions, but many retailers have found successful alternatives to price-only marketing.

Observes a sales director for a

big-name audio supplier: "Price-only promotions can backfire on you, because no matter how cheaply you try to sell a product, somebody inevitably brings it in lower. Often the price-only ads will reflect a weak sales force. The retailer feels that the only way to generate business is to show a low-ball price. Yet that price may attract shoppers without producing profit.

"A weak salesforce simply clerks the advertised turntable over to the shopper, not bothering to offer step-ups, sell a cartridge or suggest a record cleaner. No amount of price-only advertising will compensate for a weak, non-producing staff."

Naturally, smaller retailers cannot afford to buy and sell products at the same prices that a high volume dealer can. He must learn alternatives to price-only advertising, including product selection, service, expertise and buying conveniences like financing or credit cards.

Small, higher-end shops long have sought to emphasize service instead of price, but as Mike O'Hara, advertising director for a large retail audio/video chain says, "Even a high-end store has to learn to emphasize value. Times have changed.

The audio customer is more sophisticated about product and is more price conscious than ever. Value for money is important these days, and special event promotions and sales should be a part of this dealer's advertising planning."

Know Your Customers

O'Hara urges retailers to be aware of the self-image they wish to project and to keep this image in mind whenever they plan an ad.

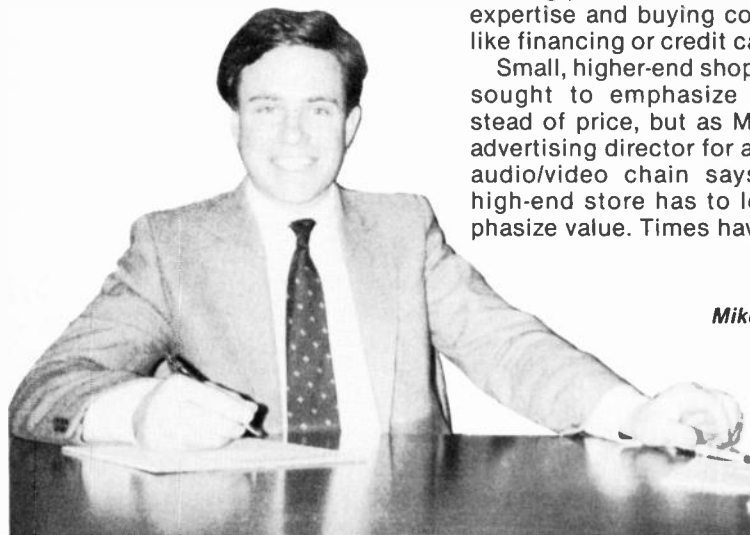
Next, it's important to target the type of customer you are seeking. Do you want to sell to the first-time system buyer? Are you looking for the up-grader? The guy who already wants a VCR? Knowing your customer will help you select which media to go with.

Radio presents more market segmentation than most other media. A wide variety of formats — hard or soft rock, easy listening, news, classical, etc., also means a wide variety of listeners. To reach many different types of people, you need to promote on several stations.

"If you're looking specifically for that 18- to 25-year-old white male," O'Hara said, "then radio is very effective."

Although less can be said in a radio spot than in print, store images can be reinforced by consistent ads sporting a theme or jingle. In large areas radio can be very expensive. For this reason retailers may avoid ongoing contracts with stations. As an alternative, the retailers will produce ad "blitzes" several times a year, or for one week every month.

Television is the most exciting



Mike O'Hara

Advertising Media at a Glance

Type	Pros	Cons
Direct Mail	Very cost effective method of advertising. Easy to gauge effectiveness, especially when promoting special events. Easy to target specific audience.	Labor intensive, requiring a lot of planning and physical work. Duplicate names on lists cost money, and must be weeded often. Mailing lists age quickly, and must be constantly updated.
Radio	In some areas, more cost effective than TV or newspapers. Good 'awareness-builder.' Excellent for autosound promotions. Supports print ads.	Difficult to reach broad market segments. Difficult to examine effectiveness. Less efficient than print in terms of message.
Newspapers	Usually cost effective. Attracts 'pre-sold' shoppers. Can purvey more information than radio or TV. Useful for measuring effectiveness. Can be re-read and saved for reference.	Many papers are experiencing declining readership, meaning that you must advertise often to be effective.
Television	In some areas, cost-per thousand is less than newspapers. Reaches across all market segments.	Except for largest retailers, TV is usually the least cost-effective method of advertising.
Tabloids	Build long-term awareness Pre-sell equipment. Are often saved by reader. Afford maximum advertising space.	Expensive and time-consuming to produce.
Magazine Insert	Creates image and awareness. Lasts longer than most other media.	More costly than newspaper production. Less immediate than other formats.
Store Catalogs	Kept for a very long time by consumer — often until he is 'ready to buy!' Can be used in direct-mail or giveaways. Good for detailing product stories and store policies. Enhances credibility. Can be re-issued.	Customers may use catalog instead of your salesman. Enables competitors to 'shop you' from afar, especially if customer brings in your catalogue. Locks you into specific inventory and pricing until catalog expires.

making their purchases. A recent independent poll discovered newspaper ads attracted 420% more response than radio from the audio/video shopper and about 140% more than TV. Clearly, newspapers afford you the most flexibility when presenting your ad. Much more information can be packed into a printed ad than a TV or radio spot can support. Details can be re-read or clipped out by the reader, and different portions of the ads can be aimed at different readers. One ad could attract both first-time and upgrade buyers, if designed properly.

Once again, it's important to be sure to know what you want to say in your ad. Avoid simple "shopping lists," bland or cluttered ads that are difficult to read. Strive for excitement. If you're having a great sale, then say so!

"If the price is hot," said O'Hara, "then you've got to make it look hot. I've seen retailers place a sale ad and make it gorgeous-looking, with a 'department-store,' sophisticated look, but not really pull with it, then take the same product, at the same prices or even higher, but promote more of a 'sale' feel — using starbursts over the prices, showing amounts saved — and literally double response.

"If you want to say value, then make it look like value."

Tabloids are a form of newspaper advertising that can become part of a very successful promotion. Because they are a removable section of the paper, tabloids stay around the home for a longer time than the typical newspaper ad. Usually eight to twelve pages in length, the dealer has the space to explain his product and policies in depth, displaying recommended equipment combinations and even video or computer "systems." In this manner, customers can be "presold" on a given product from you. Since tabloids are expensive to produce and place, care must be taken to do a professional job on them.

Direct Mail

An important, but often overlooked, source of advertising that can be used by small and large retailers alike is direct mail. Mailing lists that segment people by region, earnings and interests can be bought, making this medium one of the most cost effective possible. Unlike with newspapers, you know that the direct mail ad will be seen. Says O'Hara, "Direct mail is not a mass media ad — it's very specific. If you go into the paper, on any given day, there's a good chance that 40%

medium to appear on but may be a bad marketing move for exactly that reason. Advertising people note that many dealers who advertise on TV do so simply to see themselves on the tube. True, their ads are viewed by many people, but how many of those viewers will ever walk into their stores? An ad for a VCR pro-

motion is quite expensive to run on television. It probably would be much more cost effective if placed in the local TV listings.

High Rate of Return

A *Stereo Review* poll once indicated that about 70% of hi-fi buyers consulted newspaper ads before

of the readers will not see your ad that day. Direct mail is most likely to be read."

Direct mailings require a lot of work, both physical and planning, on your part. But you already have a list of interested people in the form of your own invoice copies — with the names and addresses of people who have spent money with you in the past. Direct mailings are great for all sorts of special events. Many shops even send out newsletters containing product information as well as promotions.

Catalogs can be very informative to the shopper and reach across many market segments. Boston's Tech Hifi once issued a slick four-color catalog featuring recommended stereo systems ranging from \$189 to \$10,000 all in one book! The impressive format and detailed policy listings helped promote a quality image as well as pre-sell systems to shoppers.

Catalogs can be mailed directly or given out in your store as part of a promotion, especially if you include some "How to buy hi-fi and/or video" information. Co-op funds could help pay for listings of specific supplier's products.

Inserts in magazines are used rarely by the hi-fi/video dealer but

Measure The Effects Of Advertising

Sometimes a retailer will run the same basic ad again and again, without ever being sure whether it works or not, said a sales manager for one large supplier. The consumer gets used to seeing the ad, then soon ceases to read it.

How can you measure effectiveness?

One simple method is to use a coupon, which can be redeemed at the shop for a discount or free tape.

Have your ad mention a drawing for those who sign up during a certain period. This type of ad works for print and radio as well.

See if your local paper offers "split runs." This is where two different ads are printed and distributed in the same edition. Each reader receives version A or B. Include a coupon to gauge response of the versions so you can determine which is most effective for you.

Have your salespeople ask their customers why they came in, and have them indicate replies on invoices.

Enclose a survey with your direct mailings, rewarding respondents with an accessory or discount.

can be very cost effective. Lists that break down a magazine's distribution by region are available from such places as Magazine Networks Inc. Therefore, a retailer could place a black and white or color ad in *Newsweek*, *Playboy*, *Sports Illustrated* or *Gentleman's Quarterly* on a regional basis, giving the quality appearance of being in a national magazine. Careful use of co-op funds can cut costs by 75% or more. Inserts are not immediate, like radio or newspapers, but go a long way to-

ward establishing image and credibility.

The most successful retail advertisers learn to use their supplier's co-op funds and promotion advice whenever possible. They take care to plan their promotions long in advance to ensure lowest cost and highest quality control in their ads. By keeping their goals in mind — who they are and whom they wish to reach — they make their advertising work for them and increase their business accordingly. □

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Inner Workings

The differences between CED and LaserDiscs are worth taking a little time to explain to your customers.

By Dawn Gordon

Back in 1978 when North American Philips test-marketed its laser/optical player in Atlanta, the units sold out almost immediately, many priced by retailers at more than \$2,000 per player. Much has changed since then. Prices have fallen; players are more dependable, RCA's CED system has challenged the laser/optical format and VHD seems to have passed into the great beyond.

After the initial enthusiasm reflected by the test-marketing, both the laser and CED systems suffered from consumer skepticism. Retailers had a difficult time persuading customers to invest in the new technology, a technology that, on second look, seemed to some a step below the VCR. An increasing number of third looks, however, has meant a turn for the better with sales steadily improving for both formats. And manufacturers, some investing in the videodisc as recently as the past few months, seem confident the system will be around for a long time to come.

Beta vs. VHS. Laser vs. CED. We should expect that whenever one company is successful with a new technology, a competing firm almost always wants a piece of the action. It happened with VCRs, and now the videodisc kingdom has two reigning monarchs. The choice a retailer makes is not so much a question of which system is better but, rather, which system best fills a client's needs.

Many consumers realize there are two incompatible systems, and they may even know the basic feature differences between them. A better understanding of the principles behind each format, however, may give you an edge over your competition. You will be able to describe in definite terms the *Inner Workings* of either format to your clients, and they, no doubt, will appreciate the information and the capabilities of the source relating it.

The Less-Expensive CED

RCA had been toying with the idea of incorporating both sound and

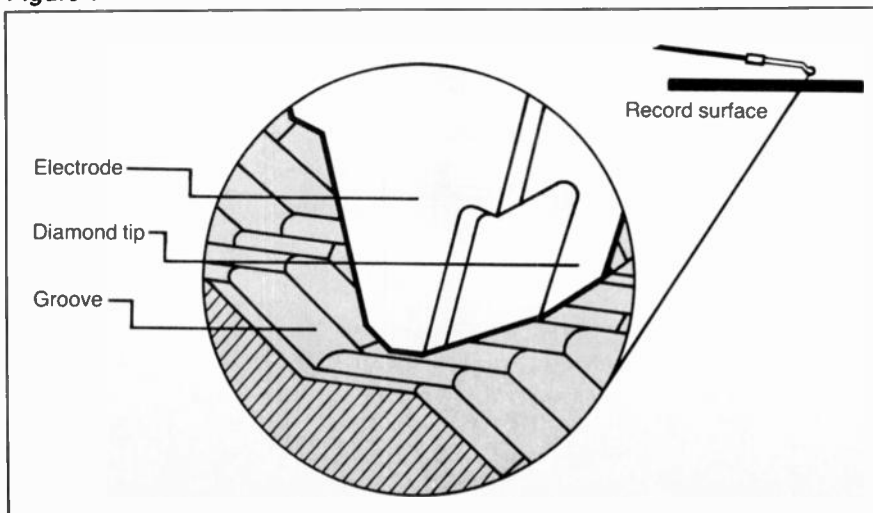
video onto a phonographic-type disc for some time (*The idea is not new — Thomas Alva Edison tried to do the same thing in the early part of this century — Ed.*), but only recently committed itself to the idea. The CED (Capacitance Electronic Disc) system is the culmination of years of research, billions of dollars, a little luck and the hope that the public would find it attractive. Apparently, the RCA gamble paid off, because the less expensive CED system is finding its way into consumers' living rooms.

This disc system is very similar to its audio counterpart. A turntable rotates a 12-inch, conductive, carbon-plastic disc at 450 rpm. When the turntable is up to speed, a microprocessor-controlled linear tracking arm begins to move across the disc's outside edge. Figure 1 shows how the user-replaceable microscopic stylus is guided through shallow V-shaped grooves that contain information in the form of peaks and valleys.

Most interesting is that the diamond stylus merely serves as a transport mechanism for a thin metal electrode only 2,500 angstroms (.000010 inches) thick. It is this electrode that electronically senses the undulations within the microscopic grooves. As an illustration of how microscopic, consider that 38 CED grooves will fill the space taken up by a single LP groove on an audio disc (see Figure 2). About 50 CED grooves would fit onto the edge of this page.

In information retrieval, the stylus electrode acts as one plate of a capacitor while the conductive disc acts as the other plate. While the disc rotates, the electrode reads the changes in distance between the peaks and valleys contained in the grooves. These changes in capaci-

Figure 1



tance then are translated into a replica of the original signal encoded onto the disc. The signal coming off the disc contains video information, synchronizing pulses and audio information. Because the groove size is so narrow, up to 60 minutes of playing time per side is possible.

CED horizontal resolution is about the same as your average VCR, producing roughly 240 lines. Audio, however, is another story. With a frequency range of 20 to 20,000 Hz and a signal-to-noise ratio of around 55 to 60 dB, the CED system can reproduce high-fidelity stereo sound. Other features are fast search, slow motion and fast motion, all in forward and reverse and without noise bars. As you probably know, the price for a CED player starts at \$299, with discs in the \$30 price range.

Broadcast-Quality Laser/Optical

Laser technology has been with us for some time now, but only recently have we seen its video capability move into the home. The laser/optical videodisc system is one of the most advanced consumer products on the market today and, except for the anticipated digital audio disc, one of the most exciting. The videodisc itself is a marvel of micro-miniaturization. A 12-inch reflective metal foil containing thousands of microscopic pits arranged in spiral tracks lies under a layer of protective plastic. Each side of the disc contains 54,000 tracks (or frames), with each track housing one video picture per revolution.

Once inside the player, the disc spins at a constant angular velocity (CAV) of 1,800 rpm. A helium-neon laser passes through a combination of nine mirrors and lenses and onto the disc itself, where it is focused to 1.1 mm below the disc's surface. Unlike the CED system, the laser begins its journey from the inside of the disc and travels outward toward the rim.

The beam is reflected off the various pits, which represent audio and video information, and travels back along the same route until it enters a photo diode array for conversion into audio and video signals. The playing time per side is 30 minutes for CAV discs, but CLV (constant linear velocity) discs, which continuously vary the rotational speed from 1,800 rpm at the inner circumference to 600 rpm at the rim, increase the time to one hour per side. This affords a longer playing time but sacrifices various special effects, such as slow motion and freeze-frame capability.

As for specifications, the laser/optical format delivers video quality

equal to or better than a broadcast signal. Depending on the disc, it is possible to get a horizontal resolution of 350 lines or more. Stereo sound exceeds the high-fidelity LP rating with a signal-to-noise ratio of more than 70 dB using CX noise reduction.

Perhaps the best advantage found with this system is the durability of the discs themselves; with their protective coating, they theoretically should last forever. Unlike the CED disc, which must be protected at all costs from dust, fingerprints and scratches, the laser disc can be handled without worry, because such surface damage does not effect the laser pickup. The picture quality remains constant at the 10th or 1,000th play.

Special effects, such as crystal clear freeze-frame, slow motion, fast motion, random-access search by frame or chapter, high-speed search and computer interaction all are possible with this system. The \$600 price tag seems a small price to pay.

Once you know how both systems work, you still must determine which system is right for a particular customer. If you encounter a videophile looking for the best possible performance, the obvious answer is laser/optical.

38 VideoDisc grooves

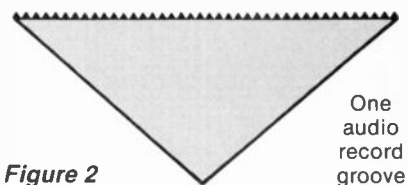


Figure 2

The answer is not so obvious, however, with a customer who is more concerned about the effect of the purchase on his or her budget. While this client may not need all the bells and whistles and might be happy with the CED format, remember to explain that the laser system delivers unparalleled performance for the extra \$300. And even though LV discs may cost slightly more in some cases, the durability benefits alone should make up the difference.

Take the time to illustrate the various features available for each system, stressing that both formats have an equal amount of software available. And if your customer really wants to know how both formats work, go ahead and tell him. In the end, it is the customer's decision, but if he or she is armed with the right information, the choice will be easier. □

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- **Microphone Input Data:** Signal/noise ratio 75dB below clipping Maximum input capability 200mV. Input-low impedance 600 ohms. Talkover—14dB program level reduction
- **Graphic Equalizer:** Active Bi Fet circuitry \pm 12dB range. Center frequencies 60Hz 250Hz 1KHz 3.5KHz 12KHz
- **Output Level Meters:** Dynamic range 20dB to + 3dB. Sensitivity for 0 VU selectable—200mV 1.25V 1.75V 2.00V
- **Program (Line) Output Data:** Maximum output capability—10V RMS/10K ohms Stew rate 12V μ s
- **Signal Processor Loop Output (Record Output):** Typical output (with most program material) 300mV
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Sony Introduces BetaMovie, Cable-Ready VCR

A one-piece video camera/recorder, a cable-ready Betamax video cassette recorder and a consumer video camera that incorporates a feature previously found only on Sony's professional cameras are making video recording easier and more professional looking, according to Sony officials.

The new BetaMovie combines a color camera and half-inch video recorder in a self-contained, handheld, record-only home movie device. The cassettes can be inserted directly into a standard home Betamax for playback without playback adapters.

"Because compact size and portability were important considerations in the initial development of the Beta format, we can design a portable like the BetaMovie without changing the size of the Beta cassette," said Sony Consumer Products Co. president, Joseph A. Lagore.

He said the camera/recorder eliminates the need for the connecting cables and carrying straps associated with component portable video systems and that he expects it to broaden the appeal of portable video, even though the more sophisticated "videophiles" will continue to be a good market for component portable systems.

Still only in prototype form, the BetaMovie should be on the market by this fall. Although limited specifications are available, Sony disclosed that the BetaMovie prototype weighs less than 5½ pounds, including the rechargeable batteries, and offers three hours and 20 minutes recording time.

Sony also is trying to make its Beta system more convenient for households with cable TV with the SL-5101 cable-ready Betamax.

"This new Betamax fills a need in cable households," Lagore said. "The SL-5101 makes it easy to record cable programs for playback at a later time."

With 105-channel cable adaptabil-



Expected to be on the market by fall, the BetaMovie brings true portability to video recording.

ity, the SL-5101 can record non-scrambled programs through direct cable hook-up. No converter box is required. Owners also can record one non-scrambled cable channel while watching another, and the Express Tuning system allows the user to select VHF, UHF, cable midband and cable superband stations in any sequence.

In other respects the new Betamax is similar to the SL-5100, with features that include front-loading operation and front-mounted controls, wireless infrared Remote Commander, seven-day/one-event programmable timer, five-hour recording capability, audio and video line inputs and outputs, a PCM switch for use with the Sony PCM-F1 Digital Audio Processor and connections for the new Sony Tricon color camera.

The HVC-2800 camera, says Lagore, is the first consumer camera to incorporate Sony's SMF Tricon pick-up tube, a technology derived from Sony's experience manufacturing professional Electronic News Gathering cameras. The new tube retains the resolution, color accu-

racy and color purity characteristics of Sony's MF Tricon design but adds the benefits of the Saticon photoconductive layer, which reduces image lag by 80% and accepts a minimum illumination of only 20 lux.

Lagore claims the HVC-2800 produces sharp, accurate, low-noise color pictures in a wider range of interior light situations and reduces the need for supplementary lighting.

Features include an 8:1 variable-speed power-zoom f1.4 lens, a detachable super-directional microphone for situations where the built-in omnidirectional mike is inappropriate, detachable electronic viewfinder that displays all critical information, automatic white balance, electronic fade-in/fade-out, single-button record/review function and "green" control positions for simple operation. The camera has a professional shoulder-mount design and weighs six pounds.

Both the VCR and camera are available immediately. The VCR has a suggested retail price of \$669.95. The camera has a suggested retail price of \$1,350.

BASF Invests Big In Plant, Equipment In '83

Some \$50 million is earmarked for expanding capacity, boosting efficiency and improving quality.

After investing more than \$10 million during 1982 in advanced coating, processing, assembly and testing facilities for its audio and video tape and computer media products, BASF Systems will up the ante to \$50 million this year, when it undertakes a major plant expansion and adds more automated, high-tech equipment at its Bedford, Mass., headquarters.

Additional monies will be spent to provide a consumer presence for the company's Qualimetric Flexy-Disk line of flexible computer diskettes, which are now being distributed through BASF audio/video manufacturers representatives to retailers nationwide.

According to marketing director Mark Dellafera, these dollars will result in added capacity and efficiency for the Bedford operation and improved quality in the audio and video cassettes and computer software products that ultimately reach dealers' shelves.

"The company's decision to make investments of these magnitudes in a soft retail market represents our belief that the economy will improve in the near future, and that BASF will earn an ever-increasing share of an expanding market for audio and video and, now, computer magnetic media," said Dellafera.

"Last year," he continued, "our commitment to quality included more than \$3 million for the most advanced coating system available, \$1.6 million for video cassette



Mark D. Dellafera

molding equipment, a state-of-the-art video slitter, a new clean room for video assembly, an environmental testing chamber for audio and video products and an automatic cassette tester that inspects every audio cassette made for five critical functions.

"And our investment in the environment included \$1.3 million for a sophisticated solvent recovery system that removes more than 99% of tape solvents from the air and recycles them at the rate of 450 pounds every hour."

Dellafera went on to say that new

coating and processing techniques and the introduction of a space-age manufacturing environment on the computer side made possible the industry's first lifetime warranty against defects in workmanship and materials, with each BASF floppy disk certified 100% error-free.

Commitments Plus

"In 1983, we will multiply our commitment at least five times with a \$50 million addition to plant and equipment, including a major plant expansion at Bedford to meet increased demand," he said. "Add to that a greatly expanded advertising and promotional budget for audio and video and a significant trade and consumer investment in computer media advertising, and it all begins to make an impact at the retail level.

"With the adoption of the IEC Standard by hardware and software manufacturers worldwide, compatibility from company to company and country to country will become ever more important.

"BASF has led the movement toward an international standard, and with investments during just the last couple of years, we have made certain that BASF products coming out of Bedford are among the finest in the world."

Asked to comment on the company's stated intention to become one of the "Big Three" premium-quality tape companies in the U.S., Dellafera only smiles and says, "We're right on target, so far." □

Considering Computers?

They can be profitable if handled correctly, says one man who should know

“The computer business right now is five to six times more profitable than the stereo business,” says William Luden, director of retail marketing for MicroPro International Corp., a leader in the computer software industry, and the man who set up the computer retailing departments for Macy’s department stores.

Luden was interviewed for HFTN by Tom Jennings, former president of JBL International and currently marketing director for Buena Vista Marketing, a California firm that sells computer designs and products and acts as a consultant to several companies in the Silicon Valley area.

Luden: The keys to success in the computer retailing business are exactly what they are in the hi-fi retailing business. And, the computer business right now is distribution constrained. The real constraint to growth in the computer business is the number of retailers out there.

Jennings: Would you recommend a consumer electronics dealer go into the computer business?

Luden: Let me ask the question that President Reagan asked: “Do you like your business the way it is now?”

Jennings: I think the answer to that one is the hard push on profits the consumer electronics business is experiencing. They are looking out with periscopes in every direction to find a profitable marketplace. They see the computer market-



William Luden

place because of the high volume and high dollars. But, they’re not certain how to get there. Would you recommend they go there?

Luden: Absolutely.

Jennings: Do you have any words of advice for getting started?

Luden: If you’re not a good stereo retailer, you’re not going to be a good computer retailer. This is not a lifeboat. But, if you are a good stereo retailer, you’re wringing that business for the money you can get out of it, and you’re simply frustrated because the pie isn’t big enough, then get into the computer industry. Find someone to run your

computer division, someone who understands computers, has contacts in the computer business, and is a purist, not a hobbyist. You also need to have a computer section in your store. The section has to be visually different from the rest of your store. You can’t just throw in a few computers here and there. You have to look like you’re in the business for the long haul.

Jennings: If a dealer has been successful in selling customers items the customers weren’t knowledgeable about, could that dealer do the same kind of job in the computer business?

Luden: Absolutely. If you sell stereos on a feature, advantage and benefit way, you can sell computers the same way. As a matter of fact, the most successful, non-technically oriented stereo salespeople can quickly (within three to four weeks) be cross-trained to be computer salespeople. All they have to understand is the customer and a little bit about the machine.

Jennings: What advice do you have for a consumer electronics retailer thinking about entering the computer business?

Luden: My advice would be to take a look at the type of customer they have right now. Don’t try to change customers. Select the type of computers your customers will buy. Also, look at your value added to your customers. If you are a service intensive shop, then get the type of computers that people will pay a little extra for to have service. If

you're strictly a price and location house, then get the kind of computers that can be sold on price and convenient location. Hopefully, the type of value added — whether it's price, convenience, location, hand-holding or service, is the sort of value already tied into the type of customer you have. If you are a service-intensive consumer electronics retailer, don't carry the Vic 20. You can't get enough money out of it to support the value added. Conversely, if you are a price, convenience, and location retailer, don't carry Altos or Dynabyte or Cromemco.

Jennings: After a dealer chooses the lines, then can he send his salespeople to the factories for training?

Luden: Yes. The better factories insist dealers send salespeople to them for training.

Jennings: How does a dealer choose the 'right line?'

Luden: The main concern should be inventory management. Make sure everything goes with everything else. Be careful not to become over-assorted. Dealers have three to four hundred hardware manufacturers to choose from, but over three thousand software manufacturers. If someone sells stereo components, he doesn't have to sell the records. In this business, a dealer has to sell the records, too.

Jennings: What are the problem areas to avoid?

Luden: Number one is becoming over-assorted. Number two is be careful about prices. In late spring or early summer, prices on all the central processing units will fall. Even if a dealer has the right assortment of inventory, he certainly does not want to be too deep. Number three is a general business question. Most area retailers are not sitting on big stacks of cash. To get into the computer business, a dealer has to add a minimum of \$125,000 to \$150,000 in inventory to be in the computer business. Make sure that inventory is financed, rather than relying on 12 turns a year to save cash flow. Remember, you're not going to sell \$75,000 the first week.

Jennings: What was your concept in the computer department at Macy's?

Luden: It stemmed from the belief that there was a large group of people who were willing to investigate computers, had the money to afford them and had a perceived need for them. But, they did not want to buy

at a specialty store because they felt they would be given a vocabulary test at the front door by some guy with a long beard and high top basketball shoes. They didn't want that — they wanted the fun and advantages of having a computer.

Jennings: Did you feel Macy's, which doesn't have the credibility of a Computerland store or Byte Shop, could fill the bill?

Luden: Rather than saying they don't have the credibility, I would say they don't have a techie image. They sell expensive items — everything from component stereos to oriental rugs. So, people are used to spending big ticket money at Macy's. They're also used to being helped there and to taking out Macy's credit cards. And they are used to having a customer service department, where if they don't like blue, they can return it. Or, if something breaks in five years, they can return it. By God, Macy's will make it right.

Jennings: What did you do to get this department off the ground?

Luden: The first founding principle was to get a risk-free environment. The customer has the feeling when he walks in the front door he is in a risk-free environment because of his understanding of department stores in general and Macy's in particular. Second, we emphasize visually we are in a fashion electronics business. Our customers don't want to buy an ugly computer any more than they want to buy an ugly stereo set. Third, we present everything in a lifestyle environment. That means we have an accounting type environment with the accounting hardware and software. We have the executive environment with the 'what if' spread sheet hardware and package, accessorized with chairs, lamps, flowers, even the *Wall Street Journal*. If you would find a credenza in the executive environment, you would find the credenza there, because these people are not used to this kind of hardware, so you have to implant in their minds visually this is what it looks like. You have to tell a story and you have to have props to tell a story. You can't just have a salesperson waving his hands. These people are brand name sensitive, too. They're not going to want to buy something that's cheaper, faster, and smoother than no one has ever heard of. They want the security of buying brand names. It's a trendy business.

Jennings: Do you see in that semblance the same kind of philosophy

as when people started buying turntables and changers with their cartridges installed?

Luden: Absolutely. It's an easier sale because the customer can understand it and the salesperson can understand it. To carry the analogy further, Macy's sells very expensive stereos. They sell a lot of \$1,000, \$1,500, even \$2,000 stereos now. They no longer sell the small electronic stuff. They sell the plug and play stuff. Our customers want to see what it looks like, they want to see it all working together, they want to know what it will look like in their homes or offices. And that's the approach.

Jennings: Did you train the salesmen on the computer floor differently than salesmen at computer stores?

Luden: Yes, we trained them differently. Computer stores talk in watts per dollar, ram per dollar, horsepower per dollar. We wanted to give a different pitch: to talk to business people about application and payback, to home users about home management and educating children at a low price.

Jennings: So you put together the environment, the merchandise and the trained salesmen. Has it worked?

Luden: Yes. As a matter of fact, it caught us by surprise. We were unprepared for the initial response. Right now, Macy's is opening up stores in its other divisions, like Bambergers. They've opened up these other stores on a sales-per-square-foot basis. It's almost a religious experience to look at those numbers.

Jennings: Is there anything in the Macy's chain that does better on a square footage basis?

Luden: Not that I'm aware of.

Jennings: In hindsight, would you do anything differently?

Luden: Yes. One I would have opened up with a larger effort. When I wrote the original business plan, I wrote into it a certain level of effort. By the time we actually opened up, that effort was probably increased fourfold. But, we really should have opened up with a much, much stronger effort. Two, I would give even more training to our sales and service people. Third, I would build a larger pool of different types of salespeople ready to roll out. The real problem in rolling out was not getting money to remodel, but finding people to stand there behind the counter that Macy's was proud of. □

audio/video SALESMAN



Avoid Misery Of The "Do-It-Yourselfer"

Many autosound specialty shops offer complete custom installation — a needed and much desired service. A lot of shops that sell autosound, of course, have neither the staff nor the facilities for such a service.

In addition, quite a few customers opt to install their units themselves in order to save money. This means that whether we install or not, a portion of our customers will take their dashboards apart next Sunday.

Because most customers have had little installation experience, care must be taken to ensure as simple a job as possible. While car stereo manufacturers usually make installation reference charts available, they must be used with caution. For example, when an in-dash unit is said to fit "with modifica-

tion," this could indicate anything from a little filing around the shaft holes to saber-sawing some steel.

Often, a given model will fit only when used with a complicated adapter kit. Whenever possible, avoid these "modifications" when dealing with the self-installer. The work may be more involved than your customer realizes, and he will blame you for any unforeseen problems that arise. If a necessary kit is unavailable, you will lose a sale anyway.

Match a car component to a customer's automobile as closely as possible, even if it means directing him away from more attractive, but hard-to-install models.

Do not take an installation chart's information as gospel unless you are familiar with the car and product in question. Remember, both may

change somewhat, even within a given model year. Your best bet is actually to go out into the lot and inspect your customer's car to be sure the products you are suggesting will fit. See if the customer really has a factory-installed radio, or whether the dash already was modified for an aftermarket set. Open the trunk and measure the speaker cut-outs if you're unsure about matching them.

Most important, be sure that your customer really realizes what work his installation entails. Does he know how to cut into a wheelwell to install speakers or fish wires into the trunk? Some customers are squeamish about cutting *anything*, even filing an eighth inch of dash. If this is the case, recommend that your store or an outside professional do the job.

Service — The Forgotten Element

Customers rush about, seemingly searching for the Sacred Grail of Value. Sometimes they appear to want only that certain name brand mentioned in their consumer magazines. Other times they seem interested only in buying a product that can do more than the current state-of-the-art — for something like \$20 less than our cost. Madly we dash about, trying as hard as we might to land our sale. When we don't, we sit and wonder, "What does that buyer really want from me anyway?"

On one hand, the customer may appear to want everything. Maybe we cannot give him all of this, but we certainly can give him some things. Each customer has his own specific needs, but there remain some general things that are desired and appreciated by nearly everyone. Sometimes it is these *general* needs that are ignored and cost us the sale, instead of a specific brand or price. By concentrating on providing the type of service that everyone appreciates, we can address ourselves positively to more of the customers that visit us.

Time is the first valuable asset that you can dispense. Your shopper is visiting you instead of choosing from a catalog because he hopes you will take the time to listen to what he needs and offer advice that will help him. High-fidelity and video components frighten him for the most part. True, he desires them and would love to own and enjoy the stuff, but he is in mortal fear of the idea of being railroaded into a decision to spend too much on too little.

He's not buying a vacation in Nantucket; he's investing a sum of money into something that should entertain his family for years to come. Like any important investment, he wants to be certain of making the right move. Just as he never would consider buying an unknown stock in three minutes, he needs time to have the benefits of this investment explained to him. In the long run, he actually spends more, if an added value can be spelled out properly. The very last thing this

customer needs is a hurried sales pitch or a sales person who constantly is rushing to the phone, ordering lunch or striking a "take it or leave it" attitude.

Care. The term "salesman" to many people is simply another spelling for "insincerity." Customers often are convinced that their own needs are the very last thing resting in their salesperson's mind, and for excellent reason. This idea is proven to them time and time again. Either they enter a shop and are ignored for 20 minutes, or they open their mouths to say three words and the salesperson drives into a frenzied sales pitch on some product that may not be what they are looking for, but is in stock.

Look at that couple standing in front of you. Think of the money that they are preparing to spend. Did you earn that amount so easily? What makes you think they *did*? Their expenditure represents weeks of very hard work. They're willing to trade it for something that they really want, not something that you want them to have.

Although they may not know the difference between VHS and Beta, they know the difference between a salesperson who cares about their needs and one who doesn't. Think about those folks who said they would "think about it." Did you do all you could to convince them that you cared about their needs, or did you simply show them a few hot numbers on display? Did they sense any lack of concern on your part? If so, it was your loss, not theirs.

Patience. You have been selling audio and video equipment for a while now. Dolby B noise reduction is about as basic to you as brushing your teeth in the morning. Low-mass tone arms are given benefits that need no explaining, and four-head VCRs are worth having, no questions asked.

Of course, the customer visiting you hasn't had quite the advantage you have of hands-on experience with dozens of products. He hasn't read every trade journal published in the past two years and has not pur-

chased a stereo since the hand-rubbed walnut console was part of the state-of-the-art. Although he knows the particulars of his own business well enough and he's *heard* of the terms "belt drive" and "direct drive," he knows as much about hi-fi as we all know about the Federal Reserve.

He's here to learn, which means you have to treat this customer as if he were the first you have had today. You may have to explain dbx six times today — each time as excitingly as the first. A good first grade teacher never tires of teaching the alphabet and neither should you.

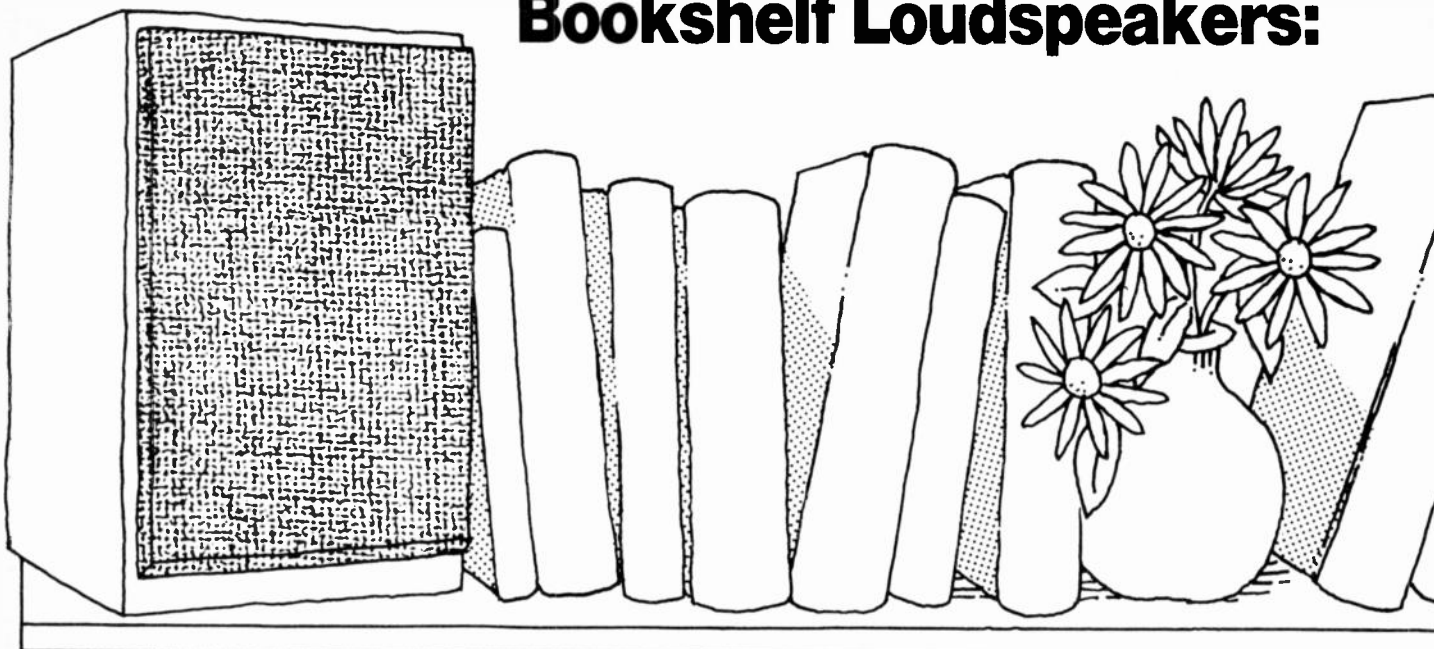
Some salespeople like to appear like audio engineers and talk over their customer's heads, tossing out undefined terms in a condescending manner. These are among the salespeople who earn the least amount of commissions. A good salesperson's talent resides in the ability to reduce a complex concept to simple layman's terms. The customer's appreciation will turn into a simple form of repayment: that of buying the product.

Professional Presentations

Most audio sales personnel have favorite demonstration tapes on which they rely. The first week that they are used, customers seem to respond positively. Eventually the tape doesn't achieve quite the same results. The recording sounds a bit dull, and the middle section wavers a bit.

Good demo tapes are the key to presenting high quality sound equipment, and the customer's first impressions are the most important ones. Remake demos on a monthly basis to keep your presentations fresh and trouble-free, and set aside one set for portable use and the other for your higher grade of equipment.

Bookshelf Loudspeakers:



Large, floor-standing loudspeakers are impressive looking and fun to demonstrate. Shoppers like their open, airy treble dispersion and floor-shaking bass response. Unfortunately, not so many of them buy them. Most of our inventory turns around the simple bookshelf loudspeakers, because of buyers' budget and space restrictions.

The term "bookshelf" speaker can be a little misleading, because many of these models never would fit onto a shelf at all. Generally, the bookshelf system is considered anything from a very small to a quite large box and, most often, is not a two-, but sometimes a three-way system. Because of their size limitations, bookshelf speakers often suffer from a lack of efficiency and dispersion characteristics, in comparison to the floor models. This means that actual placement for demonstration can be quite critical.

The customer usually has no true ultimate reference to use when choosing loudspeakers. Strictly speaking, there is no real "audio memory," so he cannot remember accurately the sound of a speaker pair heard in another shop even less than an hour ago. What he can remember is being impressed and pleased by what he had heard. In your showroom, your customer's only reference will be the other

loudspeakers on display. Because many shoppers are unable to buy anything but bookshelf models, care must be taken to ensure that your smaller systems sound adequate.

Many sound rooms are much larger than the rooms in which our customers will be using their speakers. Because of their size, bookshelf speakers tend to require careful placement to sound good. In a large showroom, there always is the danger of placing small speakers too far apart. This creates a "hole" in the middle of the stereo image, imposing a boxy sense to the sound of the speakers. If the sound field presented by the speakers appears to offer too much "left and right" but no "middle," move them closer together. Tilting them slightly toward each other will help some models preserve their imaging, but may narrow their radiation field seriously, causing them to sound thin unless the listener is positioned directly between them.

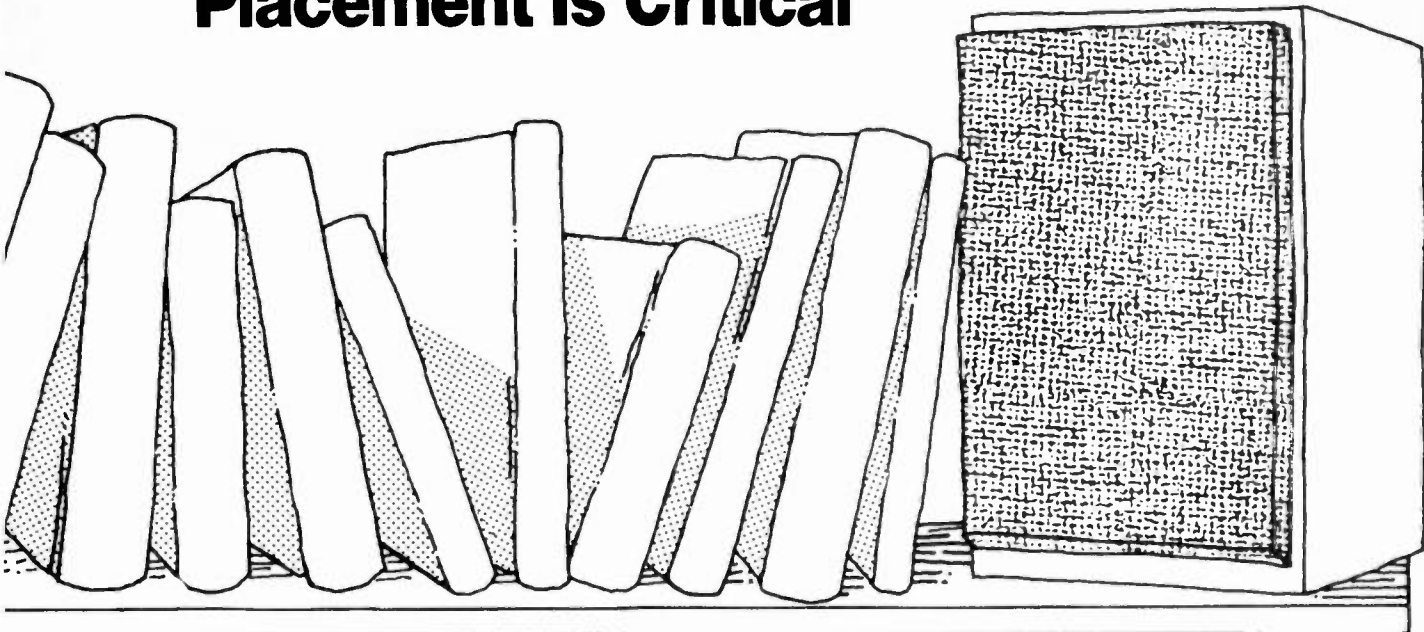
Bookshelf speakers, naturally, sound best on a bookshelf, specifically, somewhere between average head and chest height. Moving the loudspeakers up too high will make them sound brittle and moving them too low will give you a boomy effect, with little presence. Most sideways-mounted speakers tend to sound best when their tweeters face away

from each other, unless placed too far apart. Turning the woofers out may help in this instance. You may be surprised to learn that researchers have found that most loudspeakers sound most realistic when standing upside down. Cosmetically, however, a problem is created because the inverse array looks unbalanced to the shopper.

While placing loudspeakers on the floor reinforces bass output, small bookshelf loudspeakers will sound mushy and lifeless if placed directly on the carpet. Raising them via speaker stands will improve treble and mid-range dispersion. If stands are not available, or if too much bass is lost, try tilting the front of the speaker back 30 or 40 degrees with a small piece of wood or some carpet remnant. In many cases, the floor simply will not do for the bookshelf speaker. If you run out of shelf space, try placing the small speaker atop a larger floor model. If done properly, this set-up not only enhances the bookshelf speaker's sound, but calls attention to the speaker as well.

Always experiment with placement. Remember, although the manufacturer's booklet contains valuable information, no one can predict how a product will sound in your showroom. Never open a carton and toss a speaker up just any-

Placement Is Critical



where. Take the time to position it effectively...your soundroom is not an anechoic chamber.

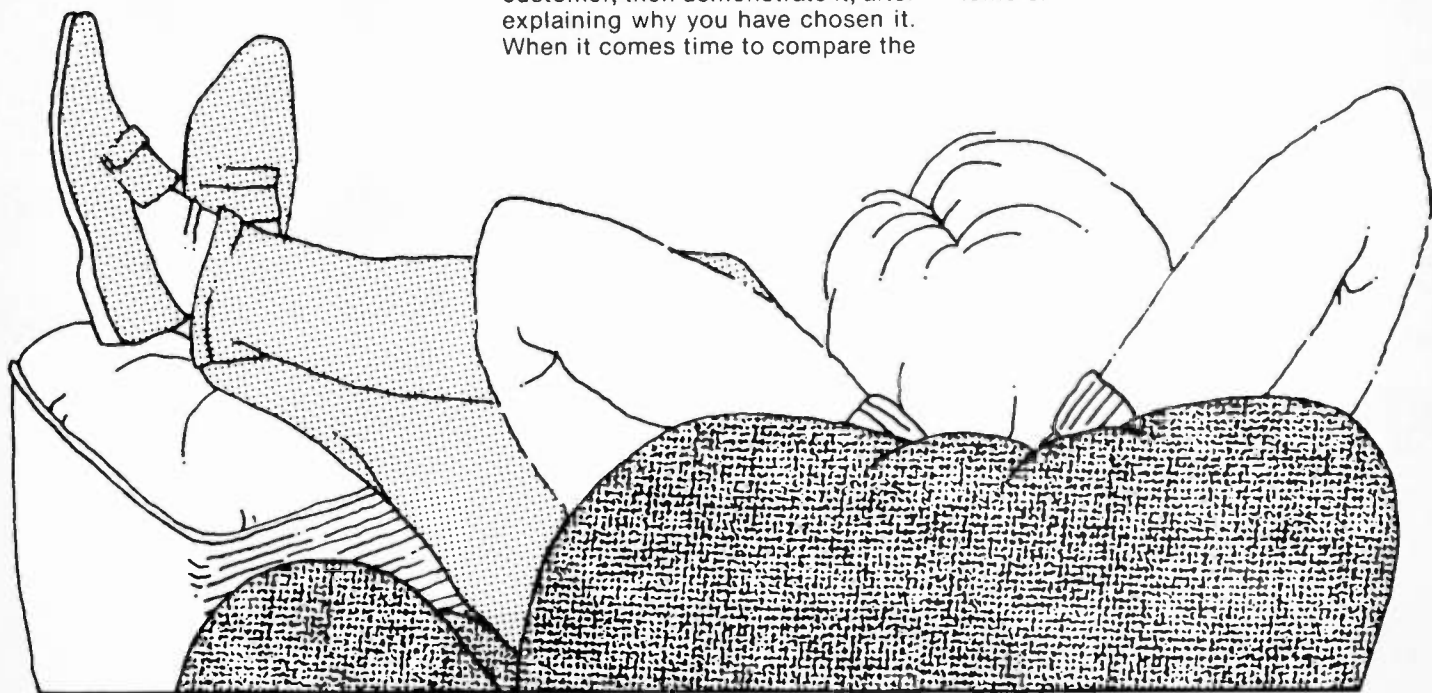
When auditioning your speaker placement, try to put yourself in the position of the average listener. Will he be standing or sitting? How far away will he be?

Lastly, never forget to demonstrate with the best sound sources

possible. Remember to control the *order* of presentation carefully. Qualify the buyer as to speaker size and budget restrictions *first, then* demonstrate. Never play that impressive, efficient floor model first; the bookshelf model may pale too much in comparison. First impressions are important. Pick the model you believe will do the job for your customer, then demonstrate it, after explaining why you have chosen it. When it comes time to compare the

product, compare it to comparable models in size or price range unless your customer tells you to do otherwise.

Never become satisfied with your "final" speaker placements. Re-think your showroom often. Experiment as much as possible. Only when it really sounds great to you can you expect it to please your customers.





Demystify Sophisticated Electronics

In its relentless effort to convince the public of its ultra-sophistication, the high-fidelity industry, for years, wound up convincing people that stereo components were too difficult for them to understand. This may be one reason why there is a lower percentage of hi-fi owning households in our country than in Japan or parts of Europe.

The suppliers in our newest product categories, like computers and telephones, are taking a more sophisticated advertising tack. Video and hi-fi manufacturers appear to be following their lead. The emphasis is on ease and convenience of operation, not hard-to-comprehend speak. In this manner, the home electronics industries seem to be

emulating the successful 35 mm camera manufacturers in pushing sophisticated products to the mass market.

Unfortunately, these new electronic categories are complicated enough without confusing advertising tactics. Your customer still has to comprehend what a base station is, or the difference between ROM and RAM. Try to remember, the next time you are explaining the benefits of a four-head VCR, that you're educating someone who wants to *enjoy* his purchase, not rebuild it. In the shopper's eyes, you exist to help demystify the product, not confuse the issue. You'll get the sale by patiently explaining the uses and differences of the models, helping the

shopper arrive at a well understood, intelligent decision.

Practice explaining products in normal, easily grasped language. Weed out data that is unimportant to the shopper. The average person doesn't care whether a computer uses an eight-bit microprocessor, but he or she certainly will care if his machine has 16K or 64K.

Lastly, never forget to explain the product in relation to the buyer's needs. An interesting overall lecture on the relative merits of voice-activated answering systems might be enjoyable to hear but will not lead automatically to a sale. Remember to ask what the customer wants, and only then show him or her what you think will do the job.

Computers A Family Affair

Many home computers are sold because "Johnny will need to learn this for school." Certainly this is a valid reason to buy a machine, although the concept of a computer as a learning instrument tends to relegate it to a sort of portable typewriter or set of encyclopedias. While the item will be purchased readily, it may be viewed as having limited uses, or a limited useful life. The availability of video games to be played on computers certainly has helped sales but continues to relegate the product to the school children's category, in many people's minds.

The trouble with the "buy the machine for your kids" sales approach is that it tends to impose restrictions in price and peripherals at time of purchase. A limited-memory computer is often seen as "plenty to learn with" for a child, while a membrane keyboard or cassette instead of disk drive appears perfectly appropriate.

Many of the people who purchase upscale computer models with the "extras" of extended memory, printers and modems are folks who realize that the home computer is more than a set of books for Johnny — it's like a new car that the whole family eventually will use. Instead of being an abstract, teach-only device for the kids, it should be transformed into a useful tool to make life easier and more fun for everyone.

Fear Of Technology

The initial resistance you will discover to this "family tool" approach is simply fear of technology. Many parents feel the Computer Age is something their children will live in, but is too difficult for them to learn. While some people are fascinated with learning BASIC and doing programming, most are confused by the new terms and concepts they hear.

Your job, when selling home computers to families, would be to assure buyers that no one needs to be

a programmer in order to use a computer. Besides the games and how-to-program software demonstrations, emphasize the availability of programs that everyone can use, like home inventories or budget planning. Word processing is a powerful computing concept that will become increasingly popular, because it makes writing and typing easier for typist and non-typist both. By interesting people in extra functions like these, you open the doors for a more complete computer system that includes upgraded memory, extra peripherals, more software and a better mainframe to begin with.

By showing how a home computer really is used by all in the home, instead of just the kids, you more easily can justify a higher price tag for the equipment.

Be prepared to demonstrate a little software, like a home inventory program, instead of just pointing to a catalog listing. By actually using the machine in the showroom, family members can learn to overcome their initial fears about using the computer, as well as realize some of its vast potential for being more than an elaborate video game.

Putting Buyers' Reservations On Hold

Many of us are handling telephones and phone-related equipment these days. Compared to some other products that we sell, a ready-made market seems to exist. Everyone knows how to use a phone, and everybody needs one. Yet the curious shoppers who are drawn over to the telephone displays seem overly cautious about a product they should be intimately familiar with. Why do they harbor such looks of consternation?

After decades of living by rules set down by "The Phone Company," customers are acting a little like slaves confused by some newfound freedom. On the one hand, they are excited by the concept of saving money and gaining convenience by choosing their own telephones. Yet, they are still cloudy on the legal issues and physical complexities of installing something that they were

told never to touch! Many seem somewhat guilty about returning their phone to buy a new one, guilt resulting perhaps from years of cheating by adding illegal extensions. Now that they can add as many as they like, folks seem both relieved and confused.

"What if they catch me?" is a question that still arises. People remember that not long ago, you couldn't add your own extension. They need to be assured that it is perfectly legal and practical to own your own telephones. Care must be taken to explain what is involved in the installation process. Remember, they're used to a no-charge service call from Bell. Only after explaining how to own your own phone should you start selling the actual features of the models you offer.

Basic questions must be answered for the consumer. Remem-

ber the hi-fi neophyte who couldn't understand why a turntable and a set of speakers wouldn't make music without an amplifier? Most of your customers are eyeing those push-button phones of yours, assuming them to be touch-tone. They'll be unpleasantly surprised when they try to make a call on a discount long-distance network. Be sure to outline carefully the details of how the phones actually work. Before selling that touch-tone phone, be sure the customer actually has touch-tone service.

The simple telephone can be a complex problem for the shopper who knows little about the product. A small amount of explanation can go a long way toward making your customers comfortable about buying their phone products and having confidence in you and your products.

AUDIO

Audio Components

The scale and proportions of the Atelier Series of audio components have been designed by Analog & Digital Systems Inc. to ensure that they accommodate the digital audio disc and related home entertainment advances. The first Atelier

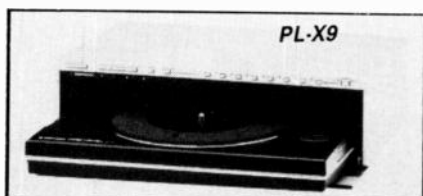


components to be introduced are the Model R1 AM/FM stereo receiver, the Model P2 record player and C2 cassette deck. These components plug into a pedestal base, Model B2, which is designed to hold the units, one atop the other, and connects the system to an electrical outlet. The components are the first results of the collaboration between ADS and its German sister firm, Braun Electronic GmbH and were designed specifically for the U.S. market. The receiver is rated at 40 watts per channel RMS from 20 to 20,000 Hz with no more than 0.1% total harmonic distortion when used with 4-ohm speakers.

Circle No. 120 on Reader Service Card

Down-Sized Audio

Pioneer Electronics (USA) Inc. is following the down-sizing trend evident in all high-technology industries with its Progression IV line of audio components. The series includes four amplifiers (A-X8, A-X7, A-X5 and A-X3) that measure less than 4 inches high, 12 1/2 inches wide and 9 inches deep but produce up to 65



watts per channel; four tuners (F-X9, F-X7, F-X5 and F-X3) that feature sensitivity of 10.8 dBf and signal to noise ratios of 70 dB; three cassette decks (CT-X9, CT-X6 and CT-X8W) that fit on a bookshelf and feature one-touch computerized controls; two front-loading turntables (PL-X9 and PL-X5) that can be placed anywhere in a stacked component system; a sound processor that includes a seven-band graphic equalizer with electronic echo (CA-X7) and two sets of speakers (S-77X and S-33X), which feature a rotating tweeter that lets the user direct the sound. Suggested retail prices range from \$380 for the CT-X9 cassette deck to \$90 for the F-X3 tuner.

Circle No. 121 on Reader Service Card

Speed Control

A variable speed control for Revox B170 cassette decks has been introduced by the Revox Division of Studer Revox America Inc. The built-in control enables speed variations and pitch adjustments to be made easily in order to provide optimum playback performance of cassettes



that have been recorded on a variety of machines. The Vari-speed range is approximately 75% to 125% of nominal (1 1/8 ips). The \$150 Vari-speed option is available by special order through Revox dealers when the B710 deck is ordered. The B710 MKII deck itself features three solid die-cast aluminum alloy chassis assemblies, two quartz-regulated Hall-effect capstan motors for tape winding and two servo-controlled DC spooling motors for playback, a hinged die-cast head assembly that rests on three mechanical reference points, microprocessor controlled functions and Dolby B and Dolby C noise reduction.

Circle No. 122 on Reader Service Card

Digital Audio

The CX-3 compact cassette deck from Sharp ensures digital quality audio without the need for a special Pulse Code Modulation adapter, additional cassette recorder or video cassette machine. The integrated heads use a .2mm track pitch that



allows a total of 18 tracks, which is recorded onto one-half of a 3.8mm tape. Each track has a recording density of 70.6 Kbps resulting in no drop output when tape speed decreases. A special fixed head assembly halves the crosstalk common with conventional integrated heads.

Circle No. 123 on Reader Service Card

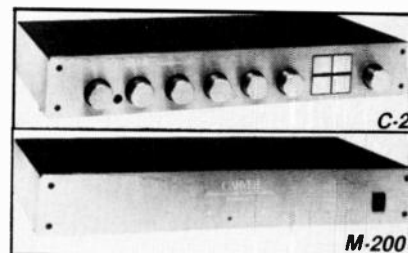
Digital Ready Components

Sony Audio is complementing its entry into the Compact Disc market with its ES series of high fidelity components. Designed to exploit the sonic advantages of digital technology and to match cosmetically the forthcoming CDP-101 CD player, the ES series includes a 100-watt-per-channel integrated amplifier with wide dynamic range capabilities (TA-F555ES); the Model ST F555ES tuner, which combines Sony's direct comparator PLL integrated circuit with the audio current transfer circuitry; and a "moderately priced" signal processor (PCM-701ES), designed to complement Sony's "reference standard" signal processor that combines flexible operation with Sony's 14-bit/16-bit linear resolution. The series will be available this spring.

Circle No. 156 on Reader Service Card

Amp And Preamp

Carver has introduced a preamplifier with switchable phono input that allows it to be used with either moving magnet or moving coil car-



tridges and a power amplifier that produces 120 watts minimum continuous power per channel into 8 ohms, 20 Hz to 20 kHz, with less than 0.05% THD. The C-2 preamplifier features an infrasonic filter, bass and treble controls, tone control by-pass, a tuner input, two tape

inputs, provision for two-way tape dubbing, an auxiliary input, an external processor loop and a mode switch. It is priced at \$350. The M-200t power amplifier features the technology of the Carver Magnetic Field Power Amplifier and also retails for \$350.

Circle No. 124 on Reader Service Card

Shock Resistant Microphone

Shure Brother Inc. says its SP19 Cardioid Dynamic Microphone is the only microphone at its price point that includes a high-quality internal rubber shock-mount to reduce handling noise. The SP19 is suitable particularly for home reel-to-reel and cassette recording, but also is useful for general-purpose sound reinforcement in schools, hospitals or churches. The SP19 features a pop-resistant, multi-stage steel mesh grille assembly, an on-off switch, a 15-foot permanently attached cable and a professional accessory swivel adapter. It is available in two versions: SP19H-C (high impedance with a 1/4-inch phone plug at the cable's equipment end) and SP19L-CN (low impedance with a professional three-pin connector).

Circle No. 125 on Reader Service Card

Three-Piece Speaker System

In response to the growing trend toward three-piece speaker systems that include subwoofers, Phase Technology Corp. has introduced the PC 60/50 Three Piece System. The subwoofer uses a 10-inch solid



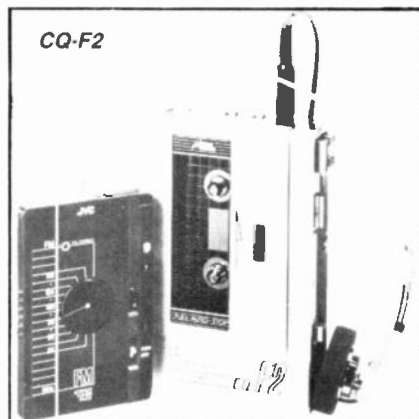
flat piston woofer whose bass energy emanates at a distance of one inch from the floor. The system carries a suggested retail price of \$500. The PC 65 is Phase-Tech's newest two-way system. It features an 8-inch solid flat piston woofer and a 1-inch soft dome tweeter. Phase-Tech also has added four models to its High Transparency Series.

Circle No. 128 on Reader Service Card

MARCH 1983

Convertible Portable

JVC's model RC-S55 stereo radio cassette recorder has a detachable cassette section that converts to a personal headphone stereo. When fully assembled, the RC-S55 consists of a four-band tuner, stereo speakers and featherweight headphones. The cassette section is detached from the main unit with the



touch of a button and operates independently from the radio and speakers with its own battery compartment, a full array of tape transport controls and jacks for two pairs of headphones, enabling the user and a friend to listen together without the extra bulk of the main unit. Another personal headphone stereo from JVC, the model CQ-F2K, comes equipped with a cassette-sized stereo FM tuner pack that contains all the circuitry required for sensitive, well separated FM stereo reception. The FM stereo cassette player also features metal tape transport compatibility, ANRS/Dolby B noise reduction, an anti-rolling tape transport mechanism and ultra-light stereo headphones.

Circle No. 129 on Reader Service Card

Rechargeable Portable

Clear Electronics has introduced a line of rechargeable personal stereo receivers that includes the model SWC-818 AM/FM stereo cassette player, the Pocket Man AM/FM



stereo receiver model EWR-501 and the Pocket Man stereo receiver model SR-301. Each model features the Clear Powermax Recharging

System with slide-out AC prongs that plug into any AC wall outlet. An overnight charge delivers up to six hours of continuous operation for the cassette and 10 hours for the AM/FM receivers. Accessory Powermax Rechargers are available for the SWC-818 cassette player. These can be recharged separately to provide immediate power when interchanged.

Circle No. 130 on Reader Service Card

Digital-Ready Cartridge

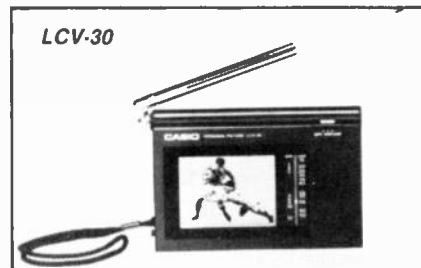
Monster Cable's first non-accessory product is the Alpha-1 moving coil cartridge, which the company says is the result of extensive research into the magnetic behavior of audio signals. It uses an ultra-rigid hollow-tube boron cantilever tipped with the latest generation of block diamond line contact stylus and a (patent pending) magnetic feedback control circuit. It is priced at \$475.

Circle No. 126 on Reader Service Card

VIDEO

Pocket TV

A television that measures 3 3/16 by 4 11/16 by 1 inches and has a 2 3/4-inch screen will be marketed by Casio Inc. beginning in July for a retail price of about \$250. Casiovision's



display element is a twisted nematic type of liquid crystal. An electro-luminescent material used as the backlight allows the picture to be seen clearly in the dark, and a translucent high-resolution LCD that uses a high-duty dual matrix drive system provides an equally strong picture in glaring sunlight. It can be operated by AC adapter; three AA size dry batteries, car battery or rechargeable nickel cadmium battery. Channels 1-12 are VHF and channels 13-62 are UHF. Other features include a built-in rod antenna, ear-phone jack and built-in speaker.

Circle No. 134 on Reader Service Card

Portable VCR Monitor

With such features as video and audio input and output connectors, built-in hue control, front-mounted controls and hand grip/stand, So-

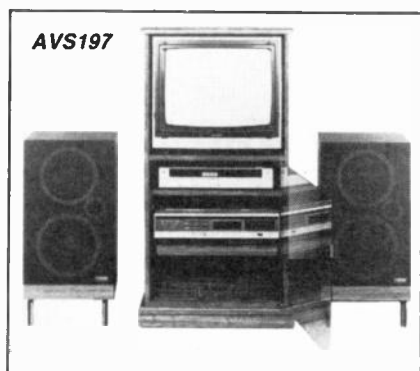
HIGH FIDELITY TRADE NEWS 45

ny's 5-inch portable Trinitron color television can be used as a handy monitor with Sony's portable Beta-max video cassette recorder. The KV-5300 TV has three-way power capability. An up/down channel scanning system on the mini TV permits easy switching to any of up to 14 VHF and UHF channels, pre-selected and placed in memory. It weighs 7 pounds, 11 ounces and has a suggested retail price of \$549.95.

Circle No. 192 on Reader Service Card

Audio/Video System

Fisher Corp. has unveiled two Audio-Video Systems, one featuring a 19-inch monitor and one a 25-inch monitor. The AVS197 19-inch system also includes a video signal controller with total remote control



capability, a pair of two-way speakers with stands and a video component cabinet. It retails for \$1,500. The AVS252 25-inch system includes the monitor, video signal controller with remote control operation, a pair of two-way speakers and a component cabinet. A video cassette recorder is optional. Fisher's newest VCR is the FVH530, which features infrared, wireless, 13-function remote control and a built-in electronic tuner with 105 random-access channel tuning. It permits 14-day, nine-event programming, a special five-mode playback system and presets for 14 stations. It retails for \$899.95.

Circle No. 132 on Reader Service Card

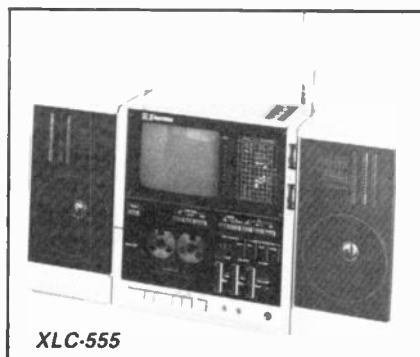
Projection TV Tuner

Kloss Video's Model T-1 105-channel, cable-ready television tuner was designed specifically for such component video monitors as the Novabeam Models One and One-A, as well as the recently introduced Novabeam Model Two. The tuner features infrared remote control and multiplex output, in addition to normal audio/video output. Suggested retail price is \$219.

Circle No. 136 on Reader Service Card

Portable Entertainment

Emerson Radio's XLC-555 is a self-contained portable entertainment center that includes a 5-inch portable TV, detachable speakers,



stereo cassette player/recorder, stereo AM/FM receiver, phono input jack, built-in recharger, built-in speaker in the center section and optional rechargeable NiCad battery pack. Suggested retail price is \$399.95.

Circle No. 133 on Reader Service Card

First Television

Proton Corp. has introduced its first television, a 19-inch receiver/monitor that combines video monitor with a tuner/preamplifier. The Proton 619 features separate video and audio inputs, split IF for audio and video, separate bass and treble controls, a built-in full range speaker as well as video and stereo audio outputs. It provides 127-channel tuning, horizontal resolution of more than 350 lines, full black level compensation, low picture overscan of 6%, frequency locked loop tuning, a high performance comb filter, headphone jack and full-function wireless remote control. It will be available this spring with a suggested retail price of about \$790.

Circle No. 137 on Reader Service Card

Professional Camera

Hitachi Denshi America Ltd., the professional video division of Hitachi, has introduced two portable color video cameras that it says are affordable even for home video con-



sumers. The first two portable color video cameras in the Everex line, the GP-41D and GP-61M, were designed for industrial, medical and scientific applications. The GP-41D features a tri-electrode tube that produces each signal of the three primary colors individually. The GP-61M uses a 2/3-inch Saticon pickup tube with a single frequency separation system.

Circle No. 135 on Reader Service Card

TAPE

Economy Cassettes

The Memorex dB Series audio cassettes introduced by Memtek Products, Memorex' new name, is being targeted to meet a growing demand for branded products in the economy segment of the blank cassette market. The cassettes are de-



signed for use on home, car or portable equipment and complement Memtek's higher priced line. Memtek also is introducing three different Memorex microcassettes, the top-of-the-line Metal Music-Micro, the MRX Music-Micro for recording in the normal switch position and the MMC Dictation Micro.

Circle No. 139 on Reader Service Card

COMPUTERS

Disc Drive Peripheral

The Ghost Drive circuit board from Aristotle Industries permits one disc drive to do the work of two, for less than \$100. When the Ghost Drive circuit board is plugged into any of the Apple computer expansion slots, software programs like B.P.I., Accounting Plus, Incredible Jack or State of the Art, that normally require two disc drives can be operated on systems with a single drive. Not a RAM board, the Ghost Drive functions by freezing the processor while the operator switches diskettes in the drive. A lighted toggle switch allows the operator to reactivate the processor. Suggested retail price is \$79.95.

Circle No. 141 on Reader Service Card

Reps & Distribution

Five sales firms have been appointed to represent **Phase Linear's** Consumer Products Line. They include: **Presti Sales** of Concord, Mass., for the New England area; **Nathan Rahimi Associates Inc.** of Key Gardens, N.Y., for the metropolitan New York area; **JARMAC Marketing Ltd.** of Hilton, N.Y., for upstate New York; **Peachtree Marketing** of Atlanta for Alabama, Georgia, Mississippi, North Carolina, South Carolina and Tennessee, and **SKOR Inc.** of St. Paul, Minn., for Minnesota, North Dakota, South Dakota and Western Wisconsin.

Dobbs-Stamford of Texas has been named **Yamaha's** Sales Representative of the Year. The award is made annually in recognition of a rep firm's sales performance, dealer training, programs, promotion, communications and market coverage. The firm also was accepted into **Yamaha's** Million Dollar Club for achieving more than \$1 million in sales in a single month.

Another new member of **Yamaha's** Million Dollar Club is **Dennis J. Telfer & Associates**, which reached the sales goal only six months after Telfer organized the firm.

Select/Essex Video has assigned more than 5,000 national dealer-direct accounts to regional distributors as part of its 1983 product distribution program. The move is designed to eliminate complications derived from direct sales. Still, current dealer-direct and new accounts will be able to place initial 1983 orders through the corporate offices, and **Select/Essex** is maintaining a small number of dealer-direct accounts for the purposes of sampling dealer response to new releases and

acquiring demographic data on a regional basis. The manufacturer of adult video cassettes also continues to service distributors, major wholesalers and chains through the company's corporate offices.

Advent has appointed four sales firms in an effort to develop an efficient and effective sales and distribution network. They are **JARMAC Marketing Ltd.** of Hilton, N.Y., for the upstate New York area; **Jim Teal & Associates** of Atlanta for Alabama, Georgia, North Carolina, South Carolina, Mississippi and Tennessee; **Segal, Alpert, McPherson & Associates Inc.** of Troy, Mich., for Michigan, and **Centennial Marketing Ltd.** of Englewood, Colo., for the Rocky Mountain states.

Onkyo tapped two firms to receive its Rep of the Year honors and named a third for a special award. Sharing the top honors are **VIP Marketing**, which handles upstate New York, and **Marketing Plus**, which covers Minnesota, North Dakota and South Dakota. **T&A Marketing Inc.** received a special award for market penetration. It represents **Onkyo** in Iowa, Kansas, Missouri and Nebraska.

Video game creator **Imagic** has entered the international market. Distribution of **Imagic** products has been established in more than 15 countries around the world including markets in Europe, Australia, Canada, South Africa and the Middle East.

Enerlite Products Corp. has signed the **RCA Consumer Electronics Division of Canada** as exclusive distributor of the Marathon 10 battery pack in Canada.

Product Decisions

Magnetic Tape International has signed licensing agreements with the **Tribune Co. Syndicate Inc.** of Chicago and with **California Stuffed Toy Co.** of Los Angeles to develop video games and computer software incorporating the cartoon and toy characters. Electronic video games with the *Conrad the Frog* cartoon character and other characters in the strip will be marketed nationally in June under MTI's ZiMAG brand. The games featuring the Puggles stuffed-toy characters will be compatible with Atari 400/800 computers and 2600/5200 game units as well as the Commodore Vic 20 computer.

Hitachi Denshi America Ltd. is now using the "Everex" name for equipment in its new Visual Products Division, geared toward audiovisual applications. The division is focusing its marketing efforts on potential users in the industrial, medical and scientific fields.

Video Aid Corp. has been selected to handle the service and maintenance for the **Ultravision Video Arcade System** from the date of purchase. The program is being offered to **Ultravision Video Arcade** system purchasers for a 24-month period.

Fiscal Reports

Pfanstiehl of Waukegan, Ill., achieved its 15th straight year of record sales in 1982. Company spokesmen, who announced the results at the January CES, credited them to the company's complete product line, high profit margins, dealer aid programs and field sales organization.



Yamaha's Don Palmquist (left) and Michio Kondo (right) congratulate Rep of the Year **Dobbs-Stamford's** Woody Taylor and Fred Dobbs.



Onkyo's S. Tanaka (left) and Mark Friedman (right) congratulate Frank Viggiano and John Parker, **VIP Marketing**, and Boyd Lester, **Marketing Plus**, co-Reps of the Year.



Gennaro



Francis



Rolnicki



Gable



Auer



Murray

Bruce Market has been chosen as national sales manager for **Fisher Corp.**'s new television division. He has been a member of the Fisher sales staff for the past four years, most recently serving as the company's national sales manager/Portable High Fidelity. Fisher also has appointed **Paul D'Arcy** to fill Market's position as national sales manager/Portable High Fidelity. Previously, he had been international marketing manager for Fisher Corp.

Thomas Paonessa Jr. has been named marketing manager/Audio Department, Consumer Electronics Division for **Sharp Electronics Corp.** He is responsible for product planning, market research, development of sales and distribution plans and local procurement for all Sharp consumer audio products. Paonessa was manager of sales administration for Sharp prior to his new appointment.

George Sangwin has been appointed to the newly created post of sales manager for **Polydax Speaker Corp.**, subsidiary of Audax, S.A., France. He previously was with the OEM Speaker Division of Pioneer Electronics and has relocated in the New York area.

Sidney R. Yates, U.S. representative from the Ninth Congressional District of Illinois, is being presented the **Recording Industry Association of America's Cultural Award** at a banquet in Washington, D.C., this month. The award is presented by RIAA to an individual or organization in government for an outstanding contribution to culture and the arts. Rep. Yates has been instrumental in obtaining federal funding for the arts and humanities.

Scott Longueil has been appointed Midwest regional sales manager for the consumer products division of **BSR (USA) Ltd.** He is responsible for all consumer sales op-

erations in the Midwest. BSR also has appointed **John Gennaro** national sales manager for the consumer product division of ADC, a division of BSR. He is responsible for consumer sales operations nationwide for the division. Longueil rejoins BSR after 10 months as a sales representative for Tree & Associates. He originally joined BSR in 1972. Gennaro rejoins ADC after serving as general manager and consultant to Electronic Research. He originally joined ADC in 1974.

Tim Francis has been promoted to national sales manager of **Monster Cable**, with responsibility for sales of each of the company's consumer product lines in the company's 16 domestic territories. Francis has held various sales positions while associated with Monster Cable and its sister company, Audio Sales Associates. Monster Cable also appointed **Bruce Brisson** director of research and development. He was involved with the design of Monster Cable's recently introduced Interlink Bandwidth Balanced and Interlink Reference cables and, in his new post, is spearheading the creation of new products.

Kenneth J. Rolnicki has been appointed vice president/marketing for **Electro-Voice Inc.** He oversees and coordinates the activities of the company's four marketing divisions. Rolnicki has worked in the electronics industry since 1965, most recently as director of marketing for Dynascan Corp.'s B & K Precision Products Group. Electro-Voice also has named **Douglas MacCallum** Western regional sales manager to work with representatives and dealers in the territory. He was sales manager of an electronics manufacturer's representative company prior to his appointment. Four engineers also have been added to the Electro-Voice staff. They are **Allen F. Eberts**, **Robert Dure**, **Christoph Heidelberg** and **Mike Miles**.

Tony Gable has been named vice president of marketing/sales for **MGT Audio Systems**, a division of Magtone Electronics Inc. He works with the company's reps and dealers and is involved in product development. Most recently president of AudioBahn Electronics Inc., Gable is a former director of marketing for Fujitsu Ten and former president of JIL.

Jim Auer has been appointed to the newly created position of consumer products manager/Magnetic Tape Division for **Fuji Photo Film U.S.A. Inc.** He assumes responsibility for development of marketing programs and promotions for all Fuji audio and video cassette consumer products. Before joining Fuji, Auer worked with consumer product accounts for Foote, Cone and Belding Advertising in New York.

Patrick Murray has been named national sales manager for **Sony Tape Sales Co.**, responsible for nationwide sales of Sony Tape's full line of audio and video tape products. Murray joins Sony Tape from Numark Electronics where he was Eastern regional sales manager. Sony Tape also has named two regional sales managers, **Adrian Delgado** for the Eastern region and **Larry Wolman** for the Southern region. Delgado joins Sony from TDK, where he was Eastern regional sales manager and Northeast district sales manager. Wolman has been with Sony since 1972, most recently as Detroit-based district sales manager for Sony Tape.

Stuart J. Caine has been appointed vice president/sales for **Benjamin Electroproducts Inc.**'s Robins Division. He is responsible for national and international sales and marketing of the division's audio, visual and computer products. In addition, **Anthony S. Vespoli** has been appointed vice president/sales for the company's Benjamin Division,

responsible for sales and marketing of the division's background music systems and portable sound systems. The company also has appointed **Josephine McCullough** vice president/administration and sales coordination. She has been sales coordinator and assistant corporate secretary for the past three years, working with sales representatives and coordinating their activities with sales management and the trade.

Charles V. Kish has been named vice president/finance for **Altec-Lansing**. In addition to experience with the public accounting firm of Price Waterhouse & Co., Kish has served as controller/treasurer for the City of Industry as well as financial manager and vice president/finance for Data-Design Laboratories and Consolidated Micrographics.

Louis F. Slangen has been appointed vice president/product planning — purchased products for **N.A.P. Consumer Electronics Corp.** He is responsible for product planning and industrial design for video cassette recorders, black and white TV, component and compact audio, radio and tape recorders for all

brands as well as the traffic sales group. **N.A.P. Consumer Electronics Corp.** also has appointed **Ronald L. Marsiglio** vice president/product planning — color television. He is responsible for product planning and industrial design for all brands of color and projection TVs. **Robert W. Strickland** has been appointed vice president/sales for **Odyssey**, an **N.A.P. Consumer Electronics Corp.** brand.

Anne Templeton has been named to the new position of associate product manager for **CBS/Fox Video**. Her primary focus is on **CBS/Fox Video's** videodisc business, including laser and CED, with responsibility for development, promotion and sales. Ms. Templeton previously was video rights manager for **United Artists Corp.**, serving as liaison between **United Artists** and its video licensees, including **CBS/Fox**.

Chuck Masters has been appointed Southeast regional sales manager for **Sampo Corp. of America**. He is responsible for all sales and marketing activities in Louisiana, Mississippi, Arkansas, Alabama, Georgia, North Carolina,

South Carolina, Tennessee and Florida. Previously he was Southeast regional sales manager for **Friedrich Air Conditioning** of San Antonio, Texas. **Sampo** also has appointed **Bert Johnson** national sales manager of private label and special markets. He is responsible for selling all **Sampo** products to department store chains for use under the firm's private label. He also handles premium and direct mailings for the complete line and research of new electronic product areas.

Harvey Gillis has been appointed vice president/finance and chief financial officer of **Activision Inc.** He is responsible for all financial operations and financial planning activities of the company. He was formerly executive vice president and manager of the **World Banking Group** of **Seafirst Corp.**, where he managed \$4 billion worth of loans to corporate borrowers.

Michael P. Oravec has been named vice president/management information systems for **Sony Corp. of America**, responsible for developing all corporate and divisional EDP systems on a national level.

hi-fi/video library

Industry Blue Books

Orion Publishing Corp. has introduced the 1983 editions of the **Audio Reference Guide**, the **Professional Sound Reference Guide** and the **Video Reference Guide**. The comprehensive pricing reference sources contain more than 30,000 audio products, more than 17,000 professional sound products and more than 3,200 video products. The products are listed by manufacturer, giving the year each model was introduced and pricing information. Cost of the audio guide is \$85. Cost of the professional sound guide is \$75. Cost of the video guide is \$35.

Circle No. 102 on Reader Service Card

Guide To Computers

This spring the newly formed **EIA/CEG Computer Division** will publish a pocket-sized booklet intended primarily to be a consumer guide to home and personal computers. However, the group says the book also can serve as a primer for salespeople, providing basic information that can be used in selling com-

puters. The booklet also could be used by manufacturers who buy the booklet and distribute it free to dealers to be used as a direct-mail piece that will acquaint consumers with the benefits of computers for use in the home. Described as "an easy-to-read-and-understand guide," the booklet touches on how computers are affecting consumers' lives, how they work and what they can do, diskettes, displays, printers, keyboards, graphics, musicvoice and software. It also offers some buying advice and a glimpse into the future of teletext, videotext, shop-at-home and robots.

Circle No. 104 on Reader Service Card

Pocket Sales Guide

A pocket-sized guide outlining features, technical specifications and service information about every product in the **TEN** line has been prepared by **Fujitsu Ten Corp.** In an introduction to the **TEN Audio Sales Guide**, the company's national sales manager **Bill Bast** recommends the **Ten Secrets To Use To Sell TEN**, selling techniques that he says have

proven most effective among top **Fujitsu Ten** dealers. The book also includes a history of the company, a glossary that explains equipment features in detailed, but non-technical, language and a ring binder format for easy updating.

Circle No. 100 on Reader Service Card

Cartridge Reviews

A booklet of 10 reviews of the **Stanton 980LZS** cartridge by international publications is available in quantity from **Stanton Magnetics Inc.** The company recommends the 28-page book as a counter aid for selling the critical "moving coil" buyer.

Circle No. 101 on Reader Service Card

Computer Reading

Sybx plans to release 36 new titles of computer-related books this year to meet the demands of new and experienced computer users in all facets of computing. Titles cover topics ranging from general interest to high-level programming.

Circle No. 103 on Reader Service Card

calendar of events

March 6-9 — 13th Annual International Tape/Disc Association Seminar, Diplomat Hotel, Hollywood, Fla. With Art Buchwald the opening night speaker, the seminar features workshops covering all areas of home video tape and disc programming and equipment, video for business, industry and education, plus three new areas of interest: video games, personal computers and computer software. *Contact:* International Tape/Disc Association, 10 Columbus Circle, Suite 2270, New York, N.Y. 10019.

March 11-17 — Electronic Representatives Association 24th Annual Management Conference, Cancun, Mexico. This year's program has been expanded to allow for an additional full day of educational programming featuring participants from UCLA's Graduate School of Business & Executive Development Center as well as expanded specialty seminars. *Contact:* Electronic Representatives Association, 20 E. Huron St., Chicago 60611.

March 16-20 — Audio-Video: International Exhibition for TV, Plus Videotech, Hi-Fi, CE, Music, Abu Dhabi Exhibition Center, Abi Dhabi, United Arab Emirates. The first international exhibition in the Arabian Peninsula region featuring products in the fields of TV, hi-fi, video and music is being arranged jointly by AMK Berlin and the Gulf Arab Marketing and Exhibition Co. Organizers are aiming at an oil-rich market eager to participate in new entertainment technologies, particularly video. *Contact:* AMK Berlin, Company for Exhibitions, Fairs and Congresses Ltd., Messedamm 22, D-1000 Berlin 19, Federal Republic of Germany.

March 22-24 — Electronic Imaging Systems: An In-Depth Analysis of

New Developments and Trends in Electronic Imaging Technology, Markets and Applications, Andover Inn, Andover, Mass. The conference, chaired by Irving Hirschberg, concentrates primarily on the imaging technology in the visible and infra-red spectra. Equipment to be discussed includes small, consumer solid state TV cameras/recorders. Also featured are state-of-the-art equipment demonstrations. *Contact:* Richard D. Murray, director of conferences, Institute for Graphic Communication, 375 Commonwealth Ave., Boston, Mass. 02115. (617) 267-9425.

April 16-19 — Professional Audio Retailers Association Jamaica Conference: Strategies for a Changing Market, Sheraton Ocho Rios, Mallard Beach, Jamaica. Topics include The Image and Market Positioning of the Audio Specialist, Retailing Strategies for the '80s, a human resources seminar with a guest speaker and a conclusion to PARA's service discussion begun two years ago at the first conference. *Contact:* Professional Audio Retailers Association, 9140 Ward Parkway, Suite 200, Kansas City, Mo. 64114.

June 5-8 — 1983 Summer Consumer Electronics Show, McCormick Place, Chicago. EIA/CEG's second installment for 1983 will include more of the newest consumer electronics products in every category. *Contact:* Consumer Electronics Show, Two Illinois Center, Suite 1607, 233 N. Michigan Ave., Chicago, Ill. 60601.

June 9-14 — Sim-Hi-Fi-Ives: International Exhibition of Music, High Fidelity, Video and Consumer Electronics, Milan Fair Centre, Milan, Italy. The last two days will be reserved for the trade. *Contact:* Segreteria generale: Via Domenichino, 11-20149, Milano. Telex: 313627 GEXPO I.

July 31-August 4 — Third Annual Association of Progressive Rental Organizations Convention and Trade Show, Caesar's Palace Hotel, Las Vegas, Nev. APRO is comprised of rental dealers who market within the consumer electronics, home appliance and furniture industries with the rent-to-own concept. *Contact:* Roy Duckworth, Global Enterprises Inc., P.O. Box 1907, Austin, Texas 78767.

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ADVERTISING DIRECTOR

Gerald F. Sweeney

ADVERTISING REPRESENTATIVES

Northeast

Lynn Anding
390 Fifth Ave.
New York, N.Y. 10018
(212) 613-9700

Southeast

Maleah Self
6255 Barfield Road
Atlanta, Ga. 30328
(404) 256-9800

Southwest

Helene Laxer
18601 L.B.J. Freeway
Suite 240
Mesquite, Texas 75150
(214) 270-6651

Midwest

Marylisa Germain
307 North Michigan Ave.
Chicago, Ill. 60601
(312) 726-7277

Florida

Bert Furey
915 Middle River
#409 Galleria Professional Building
Ft. Lauderdale, Fl. 33304
(305) 561-5553

West

George Carrick
Western Media Sales
50 West Hillcrest Drive
Suite 215
Executive Office Plaza
Thousand Oaks, Calif.
91360
(805) 496-3500

EUROPE: England: Bob Snyder, Ace International, 189 Fore Street, Angel Place, London N18 2TU. Phone. (01) 803-0241, Tlx 299042. **France:** Ace International, 56 Bis, Rue de Louvre, 75002, Paris, Phone: 261-6559/69/99, Tlx. 230955; **Germany:** Ace International, Armgartstrasse 8, 2000 Hamburg, 76, Phone (40) 225340, Tlx 2164770; **Italy:** Paolo Corciulo, Associate Publisher, Ace International, Via Ravizza 24, 20149 Milan, Phone. (02) 4693419. **FAR EAST: Japan:** Communicators, Inc., Dai-Ni Nanoh Bld., 2-20-1 Nishi, Shimbashi, Minato-Ku, Tokyo, Japan, Phone: (03) 433-2233, 2234, Tlx. 242-4259. **Korea:** Universal Publications Agency, Ltd., CPO Box 1380 Seoul, Korea, Phone: 75-8773, Tlx. 23504; **Taiwan:** Ace Media Agency Co., Ltd., P.O. Box 26-578, Taipei, Taiwan, R.O.C., Phone. (02) 703-4272, Tlx. 19826; **Singapore:** Cosmo Universal Import-Export PTE, Ltd., Singapore.

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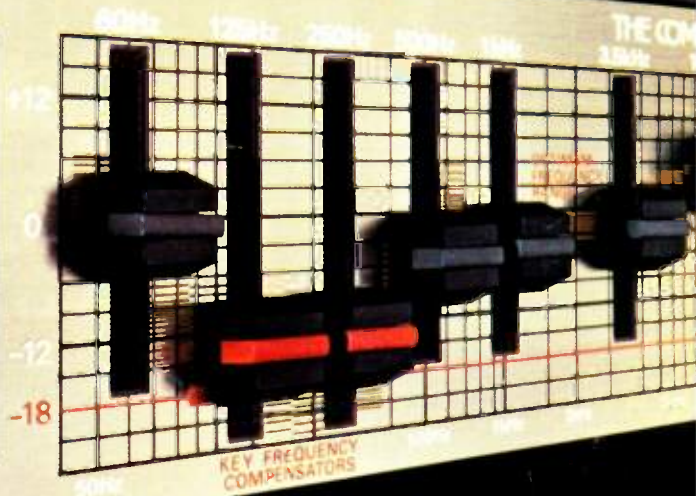
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