

Technology advances sound systems

The sky's the limit in stereo

By MARY GNIEWIEK

Picture an audio visual disc operated by laser beam application. The picture and accompanying music are produced exclusively via sound and light patterns.

Sounds like a Star Wars invention, but actually it's the latest in stereo equipment and it retails for \$29,000. Though out of price range for most

stereo buffs, it illustrates how electronic technology continues to accelerate and change the lives of Americans much like the industrial revolution did a century ago.

Perhaps one day the audio visual disc will be standard equipment in every home. In the meantime, technological innovations continue to bring down the price of quality stereo equipment, making it available to a wider range of consumers.

FIFTEEN YEARS AGO, record players or cabinet stereos were mainstays in most American households, but they have been replaced by multi-component systems.

"Thanks to mass production and more technological advances, components that cost \$200 just six months ago now cost about \$100," said Sam Dalby, store manager at Lafayette Electronics in Farmington Hills.

"Fifteen years ago, we sold mostly cabinet merchandise. Parents would buy their kids a separate component set—turntable and speakers—that actually produced better sound. As this younger crowd grew up, their ears were trained. They demanded good sound. This is the main group buying audio equipment today."

Add to more sophisticated consumer tastes the music revolution with the advent of rock and the availability of high quality products and the result is a booming stereo business.

Six years ago, Pioneer (a major stereo manufacturer) conducted in a survey that seven per cent of the public owned 400 or more in stereo equip-

ment," said Greg Jiskra, salesman for Tech Hi-Fi in Livonia.

"Today, that figure has leaped to nearly 40 percent. As technology moves ahead, higher quality equipment is available at lower prices. It makes sense to have a good sound system."

A BASIC SYSTEM includes receiver and two speakers, but turntables, reel to reel or eight-track recorders, and a variety of innovations also are available.

"The improvements in loudspeaker technology alone have been revolutionary," Jiskra said. "We've gone from the basic cone driver to electrostatic plates: metal plates that reproduce sound through an electric current."

Photo cartridge technology has also come a long way in the last decade. The ceramic record player needle of the past has been replaced by magnetic cartridges, which greatly expand the life of record albums.

Dolby noise reduction, also known as "click and pop removers," was invented in 1967. Jiskra said Dolby is already obsolete. It has been replaced by the SAE 5000 and auto correlator systems, but noise reduction technology continues to be explored.

ANOTHER INNOVATION, DYNAMIC range expanders, enhance the recorded music to make it sound like a live performance. High powered amplifiers are also a marketable commodity today.

"People are used to listening to loud, rock or disco music," Jiskra said. "But 40 to 60 watts is adequate power for

the home."

Jiskra explained that the human ear can hear from 20 to 20,000 pulses per second. That's roughly equal to ten octaves. Translated to stereo jargon, "whofers" are driver plate tones that reproduce the lowest two or three octaves. The mid-range handles the four middle octaves. "Tweeters" reproduce the upper range.

Lafayette store manager Dalby said a recent stereo show he attended featured miniature 100 power watt amplifiers the size of hard cover books.

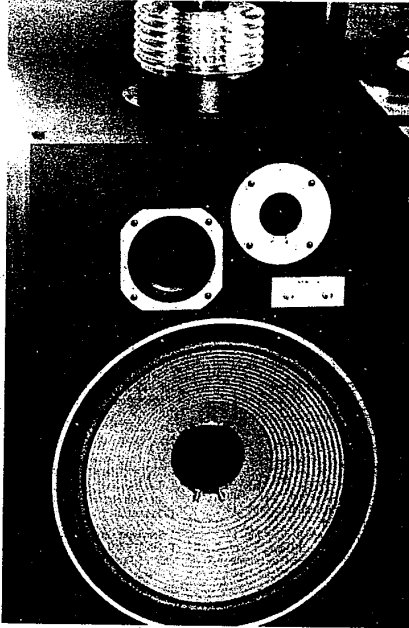
"A few years ago, amplifiers were huge. But they're coming down in size and keeping the same or better power levels. "And the changes in receivers are just as mind-boggling," Dalby continued. "We're going from needle to digital dial, next. The frequency will light up on the face of the receiver."

"Audio is a hard business to run because it changes so much. If you stop for a while, you'll fall behind."

ONE AREA DALBY said is far behind is the car audio industry.

"Sound systems available through car manufacturers are mediocre and overpriced. They're still stuck on bad AM-FM units and eight track recorders," he said.

Dalby believes cassette recorders are replacing eight-tracks because the sound quality is just as good, the possibility of recording your own music is better, and the smaller size tape is more convenient to store compactly in a car. Many new car owners, such as Dalby himself, resort to installing their own in-car stereo systems.



It may look like R2-D2 resurrected from his role in 'Star Wars' but actually (are you ready for this?) it's a High Polymer Super, Super Tweeter speaker. It's designed to bring out the high notes, like flutes or bells. (Staff photo by Harry Mauthe)

THE INSIDE * ANGLE

TAKING IT TO THE BREAKFAST TABLE is as good a way as any to describe the before class feast prepared by Larkshire Elementary School's male teaching staff for 30 women teachers recently. The Title IX breakfast featured fresh orange juice, hash brown potatoes, eggs and casserole dishes prepared from scratch. In keeping with the spirit of Title IX, federal guidelines insuring equal treatment of male and female students the female teachers are considering a reciprocal breakfast for their amateur chefs.

THERE'S A WHOLE LOT OF GIVING going on at Larkshire Elementary School in Farmington. Parents and teachers gifted school custodian Amos Deaven with a new snow blower a few weeks ago. Deaven has been at the school for five years. After each snowfall he's managed to keep the school's sidewalks clean. Angles figures it's pretty opportune of them to present the snow blower during the middle of Michigan's yearly blitz of the white stuff. But IA supposes there's no biz like snow biz.

THE METROPOLITAN DETROIT Bnai Brith Council and the Bnai Brith Women's Council are forming a singles unit for men and women more than 30 years old in Farmington, Southfield, West Bloomfield and Birmingham. The unit will incorporate social activities and community services. For further information call the Bnai Brith Council office at 354-6100.

WILLIAM BEAUMONT HOSPITAL in Royal Oak is sponsoring a free cardiopulmonary resuscitation (CPR) class from 7-10 p.m., Feb. 7. The Michigan Heart Association heartseavers class will instruct persons to recognize signs of heart attack and the CPR technique for one rescuer. Manikins will be used during the class. Enrollment is required. Class size is limited. To register, call the hospital at 288-8425. CPR classes are offered at Beaumont on the first Wednesday of the month through June.

THE COURTIERS, a trio specializing in religious songs will perform at 7 p.m., Feb. 3 in the Farmington High School auditorium on Shlawassee near Orchard Lake Road. Tickets for the concert sponsored by the Farmington Hills Christian Center are available at the Center, 23233 Drake, by calling 476-1511 or from Dickson's Book Store, and Grand Book and Bible. Seating is limited.

THE ARTHRITIS FOUNDATION, Michigan Chapter, is resuming its "Mutual Support" program at 7 p.m., Feb. 12 at St. David's Episcopal Church on Twelve Mile between Greenfield and Southfield Road in Southfield. The programs are conducted monthly on the second Monday. Jan Mentzer, physical therapist with the

Visiting Nurse Association will speak about home care for persons with arthritis. The programs are free.

SENIORS ELIGIBLE FOR some heating assistance payments from the state of Michigan may not be applying for them. The confusion comes in since this year's heating assistance is applied for on the same form used to claim a refund of local property taxes. In other years a separate application was necessary from the Social Services Department. Not everyone receiving a property tax refund is eligible for the heating assistance payment but there is a relationship between the two programs. There are some differences in the eligibility requirements and the Treasury Department can't make the computation and make the payments unless it is applied for on the form. Applicants receiving public assistance or ADC, those with more than \$3,000 of liquid assets and persons who are claimed as a dependent on someone else's taxes are not eligible for heating assistance.

These persons may still be eligible for a property tax refund. The amount of the refund assistance payment is determined by a formula relating the applicant's household income and the number of exemptions. Seniors over 65-years-old are entitled to two exemptions and receive a greater benefit than others. Assistance in preparing the form is available in all treasury department offices throughout the state.

FARMINGTON SOROPTHIMISTS will conduct their honors award ceremony at 7 p.m., Feb. 1 in Mercy Center, Eleven Mile and Middlebelt, Farmington Hills. Recently, the group presented their youth citizenship awards. First place winner was Melissa Faulkner of Novi High School. She will receive \$150 from the local club and then compete for the regional award of \$1,000. First runner-up was Renee De Marini, of Farmington High School. She will receive \$100. Second place winner Joan Hittler of Mercy High School will receive \$50. The awards can be used in any way the recipient chooses. Youth citizenship awards aren't considered scholarships but are awards of merit.

DEADLINE

Material submitted for the Inside Angles, 22170 Nine Mile Southfield, 48034, should include the name and phone number of the sender and should be typewritten if possible. Items should be received at least one week before publication and photographs can't be used. All materials become the property of the Farmington Observer but laughs are open to the community.

Anjac's got you covered in the cleverest jacket dress to happen by in quite a while. What appears to be three shabby separates is really a cap-sleeve poplin dress with navy print top and khaki inverted pleat skirt. The cardigan jacket has turned-back cuffs to match the blouse. It's a California classic that's catching on right here. In travel-ready polyester/cotton. Misses' sizes, \$80. The Woodward Shops.

Meet Ise Melchek, designer for Anjac on Wednesday, January 31 at Northland, 10:30 to 12 and Eastland, 1:30 to 3. On Thursday, February 1 at Twelve Oaks, 10:30 to 12 and Fairlane, 1:30 to 3. Informal modeling at these stores from 11 to 3.

SUPER CALIFORNIA

hudson's