

Four-Channel Sound Is Here, Sort of

The industry that brought you two-channel stereo is beginning to bring you four-channel stereo, too. They hope you're ready for it—and they're reasonably ready themselves.

If you live in the New York or Boston areas, you can hear four-channel sound right now. The Acoustic Research listening booths in Cambridge and in New York's Grand Central Station are including four-channel sound in their demonstration programs. If you can assemble two stereo FM systems in a single room, you can even hear four-channel stereo at home (over WGBH and WCRB in Boston; WNYC and WKCR in New York). And if you attended the Los Angeles Hi-Fi Show this year, you had several opportunities to hear it.

Within a very few months, you'll even be able to buy four-channel equipment and recordings for your own home use. H. H. Scott has announced the first four-channel amplifier, while four-channel tape recorders have been announced by Crown International, Viking, TEAC, and 3M/Wollensak (in chronological order). Vanguard has announced four-channel tapes; ESP-disk is making noises in the wings; and there's some likelihood that Columbia may join the party, too.

By now, I've heard demonstrations at the AR factory, at Vanguard Studios, at the AR listening booth in Grand Central, in several booths at the L.A. show, and in the home of AR's advertising manager, Bob Berkovitz. I haven't been overwhelmed (some of the demonstrations I heard were poorly done), but I am certainly impressed.

The extra pair of channels in "Surround Stereo," as Vanguard calls it, are not spread along the same wall as present speakers are. Instead, they are mounted on the opposite wall and aim to reproduce the reverberant field we normally hear from the back of a concert hall, or (in popular recordings, mostly) instrumental groups and voices not included in the front pair of channels. The effect is, indeed, surrounding. It spreads the stereo ambience more evenly around the room so that the stereo perspective changes without diminishing as you move about. Even adjoining rooms seem filled with stereophony.

In concert recordings, the "space" and acoustics of the concert hall are

defined more accurately, more realistically (and, more important, more pleasingly) than two-channel stereo has ever done. But such recordings *must* be played with the rear channels at an almost subliminal level relative to the front pair; if the rear channels are anywhere near as loud as the front ones, the sound will be gimmicky, unrealistic, and unpleasant. And since most lay listeners are apparently impressed most by gimmicks, many of the demonstrations I have heard thus far have either erred by playing all four channels at the same volume, or have omitted concert recordings altogether.

There are, of course, exceptions within the concert repertoire. The four brass choirs of the Berlioz Requiem and the children's choir at the back of the hall in Mahler's Third Symphony can only be appreciated on four-channel tape (or in the concert hall, of course), and correct relative level settings for such works is almost automatic.

But there are still problems to be faced before four-channel stereo reaches maturity. One, of course, is cost. A four-channel stereo system today will probably cost you less than twice as much as a comparable two-channel system—but only negligibly less. It will probably be quite a while before a four-channel system (not counting speakers) will be available for as little as half again the cost of a comparable two-channel system. And many listeners, faced with the doubled speaker requirements, may compromise on four mediocre speakers rather than two good ones.

Another problem is program availability. Though most recording companies have been making their master tapes in multiples of four channels (usually eight, but sometimes twelve, sixteen, or even twenty-four), their extra channels were not recorded with the spatial requirements of four-channel playback in mind. As a result, most four-channel re-releases of existing records will most likely be of popular music, whose spatial requirements are less critical.

Recording techniques for four-channel playback are still a bit primitive

(though apparently less so than they were in the first days of two-channel stereo). And standards are by no means established yet. It seems fairly safe to say that the standard tape format for four-channel will have the "front" two channels placed to play compatibly through regular two-channel tape recorders (with the rear-channel information unheard), and that all four channels will be stacked within one tape head. But there are other track formats. And at least one manufacturer (TEAC) is offering the option of a staggered-head, four-track machine, with the two added tracks displaced to an extra playback head; this system is cheaper to manufacture, but more cumbersome to use, and will probably disappear as quickly as staggered-head stereo did in the early two-channel days.

Speaker placement can be a problem. In many rooms, the chairs and sofas are backed against the wall, leaving no room to place rear speakers behind the listeners. Omni-directional speakers, which can flank the listeners, may be the solution to this problem. Or—if four-channel really catches on—fashions in furniture arrangement just might change.

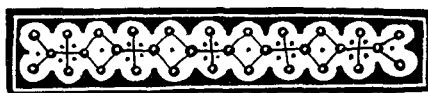
Our existing libraries of two-channel and monophonic recordings can still, of course, be played through just the front speakers of a four-channel system, or all four channels could be harnessed to produce a surround sound, if not a true surround of stereo.

Or we can even simulate four-channel sound with fair effectiveness by feeding the program into the rear channels, at low volume and with a slight time delay. Any stereo recorder with three-head monitoring can provide the necessary delay, except when playing back a tape recording. And by adding an extra, two-channel playback head just after the main, four-channel playback head, some enterprising manufacturer could give us a four-channel machine that produces fair four-channel sound from normal stereo tapes as well.

Of course, the obvious step-up of two front and two rear speakers might not really be the best route to four-channel sound. Paul Beaver and Bernard Krause of Parasound suggest the ideal would be a tetrahedral setup, adding a sense of height to the existing depth. But since this would involve a speaker on the ceiling (as well as three speakers on or near the floor), it doesn't seem commercially viable.

Perhaps some day we'll have an inconspicuous flat speaker which could reproduce good sound while mounted flush within the ceiling. But by that time we'll probably have to go to five channels to take advantage of it. And perhaps we will.

—IVAN BERGER.



Recordings Reports II

Miscellaneous LPs

Data

Bach, J. S.: Trio Sonatas No. 1 in E flat and No. 5 in C. **Vivaldi:** Sonatas in C and G minor. Julian Bream, lute; and George Malcolm, harpsichord. RCA stereo, LSC 3100, \$5.98.

Bach-Busoni: Prelude and Fugue in D. **Beethoven:** C-minor Variations; Sonata in C-sharp minor (*Moonlight*). **Medtner:** *Sonata Reminiscenza* (Op. 38). **Prokofiev:** "March" and "Scherzo" (*Love for Three Oranges*). **Ravel:** *Pavane pour une infante défunte; Jeux d'eau*. **Chopin:** Etude in A-flat (No. 26); Etude in F minor (Op. 25, No. 2). **Bach-Siloti:** Prelude in B minor. Emil Gilels, piano. Melodiya/Angel stereo, SRB 4110, \$11.98.

Clementi: Sonatas in F-sharp minor (Op. 25, No. 5); in A (Op. 33, No. 1); in C (Op. 33, No. 3); and in G minor (Op. 50, No. 3). Lamar Crowson, piano. L'Oiseau-Lyre stereo, SOL 306, \$5.95. Sonatas in G minor (Op. 7, No. 3); in B-flat (Op. 24, No. 2); in A (Op. 25, No. 4); and in B minor (Op. 40, No. 2). Crowson, piano. L'Oiseau-Lyre stereo, SOL 307, \$5.95.

Debussy: *Jardin sous la pluie*; "La Puerta del vino"; "Ondine"; "Feuilles mortes"; and *Pour le piano*. **Ravel:** *Sonatine*. Ivan Moravec, piano. Connoisseur Society stereo, CS 2010, \$5.98.

Schoenberg: *Pierrot Lunaire*. Marie Thérèse Escribano, speaker; with Ivan Eröd, piano; Helmut Riessberger, flute; Rolf Eichler, clarinet; Josef Plishta, bass clarinet; Viktor Redtenbacher, violin; Eugénie Altmann-Cloeter, viola; and Friedrich Hiller, cello; with Friedrich Cerha, director. Turnabout stereo, TV 34315, \$2.98.

Schumann: *Carnaval*; Impromptus (Op. 90). Nelson Freire, piano. Columbia stereo, MS 7307, \$5.98.

Report

At first consideration, a series of performances bringing together the lute and the harpsichord would seem destined for the most modest kind of interest, if any at all. Too much similarity of sound and overlapping of colors for a successful outcome would be the underlying thought. However, a sampling of the results achieved by Julian Bream and George Malcolm leaves little doubt that what counts is not what is being done, but who is doing it. Bream is a musician of the verve and imagination to impart vitality to anything in which he is interested, and Malcolm

This reproduction of the performance Emil Gilels gave in Carnegie Hall on February 2, 1969, is superior to the generality of "live" recordings for two reasons: the super quality of the playing Gilels accomplished which made it an occasion worth recalling, and the excellence of the techniques whereby it was reproduced. Not that every item is the equal of every other one (how often is

Muzio Clementi cannot be said to have been wholly bypassed on records, not when such a pianist as Vladimir Horowitz has put his influence to work on the composer's behalf. But the bulk of his sixty piano sonatas remain unexplored, and awaiting such an exposition as Crowson has undertaken in these two discs. He has apparently chosen consciously not to duplicate works already recorded by Horowitz (and such others as Robert Goldsand and John Newmark), with the exception of the late G-minor subtitled "Didone Abbandonata," which marks the height of Clementi's power. This, it will be noted, is

The hysterical clamor with which Connoisseur launched Ivan Moravec several years ago may be forgotten by some, but the most fortunate thing for Moravec is that it did not cause the public to forget him. As in a collection of some months ago that included Debussy's *Children's Corner*, Moravec's pianistic equipment is equal to all the demands made upon it, even in such a testing

In the aftermath of the version by Helga Pilarczyk with Boulez conducting (plus previous ones by Craft and Leibowitz), there would appear to be little remaining to be said on this subject. However, there are always interests in diverse points of view, which conductor Cerha's and vocalist Escribano's certainly are. They have the same view of something light, fanciful, and almost pretty, with little of the mordant bite or moon-struck fantasy commonly con-

Freire's talents are in admirable order in the Schubert, not so admirable in the Schumann. The first shows his uncommon abilities to produce a sustained singing sound from the instrument applied to works to which such sound is appropriate, with the kind of spontaneity that made his prior issue (four concerti) so striking. This is the easy kind of music that is difficult to play simply and convincingly. Freire meets

participates as an equal in all the performances. Bream's appropriation of material usually associated with the organ may be disputed by some, but the suitability of the material to the medium employed is self-evident. In any case, the necessary definition of the individual lines is consistently accounted for. The Vivaldi works were conceived for lute (with violin and continuo) and emerge with the freshness and clarity of unknown masterworks in these performances. Excellent processing is an additional cause for recommendation.

such the case?); but there is variety and contrast, and a rising tide of enthusiasm right through to the encores (Chopin and Bach-Siloti). Least to my taste is the playing of the Beethoven Variations, but it is followed by a version of the *Moonlight* that has had few contemporary equals. Fine playing throughout and superbly reproduced.

not to be confused with the early G-minor, which appears on Record 2. The first impression of Clementi's writing is of its superficial resemblance to the early, formalistic writing of Beethoven. However true, it is not to Clementi's discredit, for he was four years old when Mozart was born, and widely known when Beethoven was only a child. Beethoven soon grew beyond what he had absorbed, but Clementi continued to grow, as Crowson's well-chosen selection demonstrates. He also has the pianistic skills to validate his chosen task.

piece as "Ondine." Some greater variations of color would have been desirable, and the decision to utilize a Boesendorfer piano in a Viennese surrounding may be subject to question. Rich tonal requirements are admirably met, but the less vivid, more percussive patterns of the "Toccata" (in *Pour le piano*) and the Ravel *Sonatine* do not have the dry crispness they should.

sidered basic in Giraud's verses. Indeed, Schoenberg himself was aware of the danger that lurked in the work's content being mistaken after the passage of years. All the musical amenities are conscientiously observed in this performance (place of origin unidentified), but the all-important matter of "tone" comes uncomfortably close to confirming the possibilities noted by Schoenberg.

the test more than commendably. At its best, his playing of *Carnaval* has similar distinctions, but the level of quality is not so consistently sustained as it is in the Schubert. A tendency to accelerate where it is not wanted is combined with more than a scattering of wrong notes . . . both to the detriment of the kind of result for which he is aiming. Otherwise, it is a performance of many endearing qualities.
—I.K.