

EXCLUSIVE!

HOW TONY MARTIN USES RECORDERS

JOINING A Tape club

TAPE FOR Folk Dancing

RECORDING XMAS MUSIC

TWO NEW FEATURES: TEEN TAPERS • EDUCATORS' COLUMN

NEW PRODUCT REPORTS:

DOUBLE-PLAY Mylar tape

T-11 RECORDER



Tony Martin rehearsing with his recorder.

FOR FINE SOUND ALL AROUND



standardized on audiotape audiodiscs audiofilm



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HERE IS THE TAPE RECORDER THAT "COULDN'T BE MADE"...

What a serious high-fidelity enthusiast wants in a tape recorder has never been a mystery. He wants a recorder which, at $7\frac{1}{2}$ ips will equal or exceed professional performance at 15 ips— and at a price comparable to the price of the usual garden variety of "home recorder". In other words, he wants flat response over the entire audio range, undetectable noise, hum, wow and flutter and professional NARTB equalization—at $7\frac{1}{2}$ ips (to give up to 90 minutes of playing time on a 7" reeel at a cost lower than one good LP record)— and all for less than \$300.

2

- 2

reel at a cost lower than one good LP record) — and all for less than \$300. Now, DeJUR, a great name in high-quality precision cameras, answers the demands of the HiFi enthusiast in every particular. For the first time in America, he can have a tape recorder meeting his most exacting perform-ance requirements for a fraction of the price he would normally expect to pay. Compare it in an A-B test with the most expensive professional recorder your high-fidelity outlet carries. We're that sure you won't be able to tell the difference! Now, let's get down to specifications.

Now, let's get down to specifications. They have been checked by an inde-pendent engineering firm and con-firmed by the testing laboratories of America's largest high-fidelity distributors

FREQUENCY RESPONSE

At $7\frac{1}{2}$ ips, the frequency response is 40 cps to 16,000 cps ± 2 db (the closest comparable machine is 1,000 cps *less* and \$100 more!) Even at $3\frac{3}{4}$ ips, the DeJUR Dual Professional is flat from 50 cps to 10,000 cps ± 2 db.

SIGNAL-TO-NOISE RATIO

Noise is down 55 db (that equals or exceeds the figure for recorders priced at \$600 and up!)

FLUTTER AND WOW

The DeJUR Dual Professional uses a heavy-duty genuine hysteresis dual-speed, synchronous motor, the same type of motor used in \$1,000 studio re-corders (even the better "home record-ers" use only 4-pole motors!) A hys-teresis motor is independent of line voltage fluctuations, thus eliminating a major source of wow and flutter. Both are less than 0.1% at 71/2 ips, 0.2% at 3¾ ips (the competitive recorder closest in performance has 0.25% at 71/2 ips and costs \$100 more!)

EQUALIZATION

Professional NARTB equalization is used throughout the DeJUR Dual Professional. This means that, not only can you make and play back tapes of per-fect fidelity, but you can also play com-mercial pre-recorded tapes the way they were *meant* to be played.

INSTANT TRACK SWITCHING

Four separate heads are employed in the Dual Professional — an erase head and a record-playback head for each track. When you reach the end of a reel on the first track, you simply press a button and the tape reverses its motion recording or playing back the second track! Anyone who has fussed and fumed as he tried to change reels in the middle of a symphony will greet this feature with cheers!

ELECTROMAGNETIC DYNAMIC BRAKING

In the DeJUR Dual Professional, there are no mechanical clutches, belts and pulleys to get out of order. The dual speed hysteresis motor is reversible and electromagnetic dynamic braking is employed for instantaneous stops and starts without tape strain or stress.

ILLUMINATED TAPE COUNTER

An illuminated, clock-like dial indi-cates elapsed footage so accurately that the tape can be indexed to a single note!

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Inexpensive DeJUR aluminum foil leaders are available which automatically stop tape motion in either direc-tion! There's no need to re-thread — no flopping tape ends.

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A piano key switchboard controls all recording and playback functions through relays. Even your wife can operate the DeJUR Dual Professional without an instruction manual! OTHER EXCEPTIONAL FEATURES

Instantaneous stopping in record or

playback, less than ¹/₄" in fast wind; 2 high impedance and 1 low impedance inputs controlled by selector switch, re-wind time of 90 seconds for 1200-foot reel in either direction, foam rubber pressure rollers, relay operated and triple-fused for protection against improper operation, 105-220 volt, 60 cycle AC operation.

And the price? That's the biggest surprise of all! The DeJUR Dual Pro-fessional Tapedeck is only \$299.50 audiophile net!

Also available in a Also available in a handsome, scuff-proof carrying case complete with built-in 6-watt power amplifier, 2 electrostatic speakers, 3 PM speakers and widerange cardioid dynamic microphone for only \$379.50 audiophile net.



AVAILABLE ACCESSORIES

Remote control foot switch \$19.50. Wide-range cardioid microphone \$29.50.

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DeJUR-AMSCO CORPORATION Dept. TR-1, Long Island City 1, N. Y.





THE TAPE SHELF HAS THEM STEREOPHONIC (BINAURAL) TAPES

Not just a scattered few but the largest collection on the market —a few on "custom order" but most of them IMMEDIATELY AVAILABLE for prompt shipment—Staggered head spacing for MAGNECORDER, AU-DIOSPHERE, and LIVING-STON. "In-line" (stacked) head spacing for BERLANT, AMPEX, and the sensational new

AMPEX 612 STEREOPHONIC TAPE PHONOGRAPH

As agents for the Livingston Tape Club we can offer a fastgrowing list of stereo/binaural tapes from the famous "Master Tape Libraries," along with over 100 monaural tapes, full track and dual track, at unprecedented low prices. (Mail coupon for particulars.)

We represent leading tape libraries that offer a wide range of high fidelity full track and dual track professionally recorded tapes.

A tape recorder without these fine tapes is like a radio receiver used to bring in only one or two stations. Why not multiply the enjoyment dividends from your tape recorder investment?

TAPES FOR CHRISTMAS

Of course! And NOW is not too early to be making your selections. What better Christmas gift than these tapes—or, still better, a membership in the Livingston Tape Club?

Moil this coupon today!

THE TAPE SHELF Box 214, 22nd St. Station St. Petersburg, Florida				
Please send free listings and details regard- ing the LIVINGSTON TAPE CLUB, with its 25% discount to Members. I am particularly interested in				
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ADD RESS				

MAGNETIC FILM &

TAPE RECORDING

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The incomparable high fidelity and rich tonal quality of Revere Tape Recorders is the direct result of a Revere exclusive, patented feature. "Balanced-Tone" is the control that coordinates amplifier and acoustic system response to emphasize both high and low tones, giving strikingly realistic HIGH FIDELITY sound reproduction, even on low volume. Compare and you'll choose REVERE!



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play tape. Automatic keyboard controls; index counter. FREQ. RESPONSE: 3.75 i.p.s. $-40-7,500 \pm 3DB$; 7.5 i.p.s. $40-14,500 \pm 3DB$. WOW 0.3% Max. With microphone, radio attach. cord, tape, reels, **\$212.50**



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volt. With reel adapters and plugs

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REVERE T-11 CUSTOM RECORDER For professional use and custom home installation. Accurate 7.5 i.p.s. tape speed. Solenoid operated keyboard push-button control. Revere patented automatic head demagnetization. Two-level record-

ing indicator. Index counter. Accepts 3, 5, 7 and

 $10^{1}/_{2}$ -inch reels. Monitor amplifier with $2^{1}/_{2}$ watt output; cathode follower output. 2200 ohms at 1

FREQ. RESP. 40-16,000 ± 3DB WOW AND FLUTTER less than 0.2%





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\$264.50

The preference for Revere by artists of renown is your guide to recorder selection.



RDBERT CASADESUS pigno virtuoso



LAURITZ MELCHIOR great Wagnerian tenor



Tony finds many serious uses for his Webcor too. With the youngsters in bed for the night he works on a new tune for his TV show. The recorder enables him to work out lyric phrasing and delivery in the privacy of his study. This "homework" in turn cuts down on the time taken to make a recording, or to rehearse a show. Rehearsal times, with large bands and staffs can be very, very expensive. Tony feels that the low price of his recorder has been repaid many times over.

shot at the refrain.

Then, when we've finished the recording and listen to the playback—well, 1 don't know of any more fun a family could have together in its own home than this.

I must say a certain glow goes through me when Nick, who considers himself an expert on vocalists of our time, turns to me and says, "Dad, you show promise. With a little coaching I think you might even make a career out of singing." (Sub-teenage observation)

This "coaching" bit is an old family gag, because it's well known that I've never taken a singing lesson in my life.

Naturally, singing into our microphone isn't the only kind of tape recording done in the Martin home.

I'll never forget the night Nicky wrote a speech he had to deliver in class the next morning. I guess he really wanted to get an "A" from the teacher in the worst way on this assignment. He must have rehearsed that speech in his room a half-dozen times (and Nicky isn't addicted to homework). Then he came out of his room and said, "O.K., Dad, let's see how I sound."

But with the Webcor in the house, he wasn't going to trust his admiring parents, he was going to depend on his own toughest critic—himself. So we set up the tape recorder and Nicky delivered his oration. Then the playback. Then the re-writing of that paragraph that didn't come out like it was intended. And then—the conductor, Mrs. Martin, took over. "Off to bed, young man," she ordered and Nicky's tape recording activities were over for the evening.

In case you're interested, Nicky got the "A". I think he might have gotten the "A" anyway—because he's a pretty bright kid. But try and tell him that. As far as he's concerned, our recorder is man's second best friend, ranking only after our pooch, Noah.

In a family such as ours, a tape recorder naturally has a

variety of uses—serious uses—that might not be typical of too many other families . . . for instance, when Cyd is working on a complicated dance number with Gene Kelly at Metro-Goldwyn-Mayer studios, the studio music department will often provide a tape record of the number for Cyd to play at night. Thus, while soaking in a hot bath and loosening the kinks that come from a hard day's ballet work, plus exercises in the studio gym, Cyd can absorb the music, listen for and learn her cues, visualizing the progress of the dance and the improvements she will work for tomorrow with her partner.

The same homework principle is true in my life. Every performer knows that with a little more work, a little more experimentation he can improve the job he is doing. But life doesn't always offer you the chance for maximum experimentation. When you're in a recording studio, with a 60-piece orchestra and perhaps a 30-voice choral ensemble backing you, there is generally a little man with a watch, too. He's watching an element called "overhead" and we (the conductor, the artists and repertoire man, and myself) know that we have only a limited amount of time to rehearse. But the way I lick this problem is by getting my accompanist, Hal Borne, to tape a pianoed arrangement of the song I am about to record several days in advance of the actual session. Then, in the privacy of my study at home, with soundproofing between me and the kids' bedrooms, I work out my delivery, nuances of lyric phrasing and other such items that contribute to the eventual success of the record I will make.

i

Another use we make of the recorder, which while professional for us, can still bring pleasure to anyone is recording off the air. With the recorder I can get an actual check on a radio or TV show that captures the whole program from the commercials to the music. Listening to the playback with a critical ear helps to make the show better with each passing week. Many rimes too, I'd like to catch a program but can't do so because of my own commitments so our chief engineer Cyd makes a recording of it for me to which I can listen when I return home.

Something else I like to listen to, especially after a hard day's work, are the soothing melodies of the Leonard Sorkin strings from the Webcor Tape Library. These reels of music on tape are really relaxing.

While such uses of a tape recorder can't be called typical for many families, it's suprising when I talk with friends of mine in all walks of life—not merely in Hollywood nor in the entertainment profession—who have specialized problems of some kind in their business lives who can and often do lick these problems with a tape recorder at home.

So our Webcor is far from a mere gadget. We in the Martin household feel it is as much a part of modern living as a TV set, or maybe a better example would be an automobile, for what I'm trying to say is that in addition to providing great pleasure, our tape recorder has a very vital function in our lives and, just as with the family motor transportation, now that we're using it so regularly it would be well-nigh impossible to live without it.

But I've been saving the most important use of our Webcor until the end. Just after the war, a vary talented man name of Ed Murrow made one of the truly impressive records I've ever heard. It was called "I Can Hear It Now." I'm sure many of you have heard one of the series he eventually cut, in which he crowded more living history and flavor of our times since Marconi than you can find in many sixvolume literary masterpieces. Well, Murrow's approach gave me an idea on a much more modest and personal level, but I am attempting, through the use of our tape recorder, to compile such a record of our family. How did little Tony sound at three and what was Nicky thinking about when he was seven, what was that nice thing my old commanding officer in the C-B-I theater said about me when he spoke at the Frairs dinner honoring me for years in show business. the hilarity of the birthday party with the Jack Bennys, when Jack had us holding our bellies with laughter on the subject



Performers are hard working people and a lot of their time is spent away from home (for instance, Tony's very lovely wife, Cyd Charisse, was at the M-G-M studio when these pictures were taken). The moments they can spend with their families are doubly precious. The recorder provides a focal point for activities of this musical family.

of his 39th birthday (and without benefit of script writers)

To all of these events, major and minor, in the lives of my family I have brought the unobtrusive presence of our Webcor recorder—knowing that these fragments of joy in our lives thoughout the years will be all the more freshly remembered, re-lived because years from now, instead of that vague "Do you remember when" (to which little Tony might reply "Uh-uh.") 1 will have a carefully edited Tony Martin version of "I Can Hear It Now." It will be treasured by us as greatly as any possession we have.



Tony makes a "sound snapshot" of little Tony. As the years pass these reels will become increasingly valuable to the Martin family, as cherished memories are relived on tape.



"Did you get an A?" asks Tony. Brother Nick has found that the recorder is a help in his school work, especially those parts of it that require memory work or public speaking.



ROYAL CORONET Portable Tape Recorder



TWO MOTORS! TWO RECORDING HEADS!

NEW TAPE COUNTER! THREE SPEAKERS! NO REEL TURNOVER! For matchless, professional-type performance at moderate price, the Webcor ROYAL Coronet is the finest value on the market today! Actually, it offers you features no other tape recorder of comparable or even higher price has!

Balanced sound system with three speakers and omni-directional sound reproduce music with the thrilling effect of stereofonic dimensions.

Two motors maintain constant speeds at 7½ and 3¾ ips. Two recording heads eliminate the nuisance of reel turnover . . . permit instant change from one track to the other.

Easiest operation with one-knob controls. Input, output jacks. New Veedor Root Tape Counter. Switch permits monitoring with or without recording. Tone control. Fast forward and rewind. Super-sensitive system. Multiple negative feedback circuits assume minimum distortion.

See your Webcor dealer soon for a demonstration of the Webcor ROYAL Coronet. Ask him too, about the Webcor Library of pre-recorded tapes, with their fine musical selections.

All music sounds better on a WEBCOR

tape recorders EASIEST OPERATION!

ROYAL

Portable Tape Recorder

The ROYAL is the most popular tape recorder in the world today.

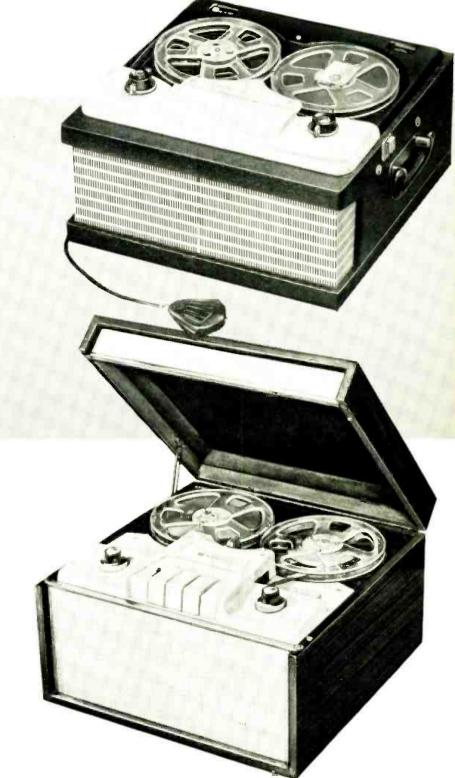
The ideal tape recorder for all-purpose recording. High fidelity reproduction. Two recording heads, two motors for constant speed. No reel turnover. Input, output jacks. Monitor switch, New Veedor Root Tape Counter. Dual speeds at 71/2 and 31/4 ips. Automatic stops at end of tape. Easy oneknob controls. Safety button to prevent accidental erasure. Multiple negative feedback circuits for minimum distortion. Top quality construction for years of troublefree service.

FANTASY

Push-Button Tape Recorder Table Model

(Also available in portable model)

Without doubt, the world's best value pushbutton tape recorder. Easiest operation. Editing switch. Fast forward and rewind. Two speeds: 71/2 and 33/4 ips. Monitor control. High fidelity sound system.



See the Tony Martin TV Show • Every Monday Night-NBC Network



.... music for dancing, for young and old alike.

So You Got a Recorder for Christmas!

.... here are some tips that will enable you to have the most fun and use from your machine.

by Jeffery Grant

COUNT yourself lucky if, besides assorted bottles of 90 proof stuff, slippers, shirts, handkerchiefs and fantastic neckties with palm trees, Santa Claus had the goodness to deposit under your evergreen a tape recorder.

But what to do with it? A silly question for any staunch devotee to the cult of high fidelity. No sooner than trembling fingers have eagerly torn ribbons and wrapping paper away, the recorder is hooked into the System. With a watchful eye on db meter and oscilliscope, the recorder is put through its paces and checked out. If the recorder meets the test (as most any of today's instruments should), it is properly enshrined in a labyrinth of nobel gadgetry and proudly displayed for all visiting golden ears to hear and appreciate.

But what if, perchance, you are not a full-fledged high fidelity devotee? What if you want your music with a minimum of noise and distortion, appreciate the purity and crispness of sound that only tape can give . . . but only at occasional intervals?



All too frequently the tape recorder is permitted to become an expensive toy, something that it decidedly is not. Upon suitable occasions it is taken from the closet and used to entertain the neighborhood gang. Whopping good party tun, true. But the recorder is designed with a more important Mission than recording the melodies of the college bunch or a hidden microphone behind the couch, all in the interests of Good Fun. Only trouble is that after the recorder has entertained party guests until their sides positively ache from laughing, like any toy, it becomes progressively less funny each time you play with it.

Now, there is nothing wrong with expensive toys. If you buy your Cadillac cars in shades to match your wife's wardrobe or if you think mink is for bath mats, one good, solid belly laugh is worth the price of a tape recorder alone. That explains why, five years ago, owners of home tape recorders were chairmen of the board, corporation presidents, Indian Maharajas, Las Vegas saloon owners, to say nothing of oil drillers and gold diggers.

Not that recorders were excessively expensive. All the time recorders were gathering dust on closet shelves, a jungle forest of television roof antennas was springing up on all sides. People *knew* what to do with their set while a tape recorder appeared as remote as the atom bomb.

Tape recorder manufacturers were far from blameless. Much of their misery was self-imposed. Except each year recorder sales made a healthy jump, so they didn't have much time to spend being miserable. They were just busy making machines.

Instead, most of the misery was reserved for wives determined to keep a Nice Home. Most recorders, being square boxes with a handle and covered with garish leatherette material, by any homemaker's standards, definitely did not belong in the Nice Livingroom. Consequently, tape recorders found themselves banished to closets. Human nature being what It is, the recorder did not emerge from the closet except at increasingly infrequent intervals. Mrs. Homemaker did not like magnetic tape boxes, either, when stacked on end in her livingroom bookcase. Consequently, many a treasured tape library was banished to a far away drawer, making its accessibility one step removed.

The recorder you find under this year's Christmas tree is far from likely to be a square box, designed by a mere crude and unartistic electronic engineer. It is more than likely to be a creation which fits unobtrusively into any livingroom. whether modern, contemporary, or period. Its walnut, mahogany, cherry, or blonde birchwood finish will delight any woman with a can of Johnson's Glow Coat. Some of America's leading furniture stylists have worked on the new tape recorders, Paul McCobb included. If the recorder is a portable, it is still essentially designed for the livingroom and with your wife in mind.

Needless to say, the electronic wizardry inside is well calculated to delight you. That is, providing you have a finer appreciation of Things Electronic as well as a Trained Ear.

So, Rule Number One for enjoying your new tape recorder: Get it into the livingroom, or wherever in your apartment or house you spend most of your waking hours in relaxed enjoyment. Sell your wife on the tape recorder as an attractive piece of furniture. Keep it near at hand, close to your favorite stuffed chair (providing your wife's decorator permits you to have one). Make it easy for yourself to use your recorder, frequently and often.

By specific example, show the rest of your family how everyone in the whole household can enjoy and profit by the new tape recorder.

Be sure to connect your recorder to your television set, permitting you to record directly from the speaker. Also, if your television set does not have a good built-in AM-FM radio, a tuner is an invaluable accessory purchase.

Countless hours of good listening music can be recorded right off your AM-FM radio. If you are fortunate enough to live in areas where FM broadcasts emanate "live," a treasury of music is yours, surpassing anything available. third generation, on discs. The music is yours for the cost of "raw" magnetic tape alone. Literally. a fantastic bargain in good listening.



Even though you may not be fortunate enough to tape "live" FM broadcasts, at least you can record hours upon hours of good music from both your local AM-FM stations.

For the investment of a few hours, a pair of scissors (demagnetized) and splicing tape, you can make reel after reel of background music. Simply edit your tapes, splicing various types of music together. As example, music for dancing can be divided by fox trot, waltz, rumba, etc. You can edit a continuous playing reel of music for dining, for relaxing, for dreaming, for romancing, even for sleeping (a pillow speaker is a good bargain for the restless sleeper).

Any housewife will tell you that soft, well-chosen background music makes morning household drudgery almost a pleasant, floating dream. Any housewife will also tell you that the right kind of soft dinner music in the evening, together with candlelight, will add additional flavor to the best cooked meal. Furthermore, any housewife will tell you that well-chosen romantic music is a good tonic for tired husbands, can help establish a more receptive mood for presenting a particularly harsh bill from the milliner.

Music is literally one of the essential basics of our life. With a tape recorder, cost of music need be no bar to enjoying the type of music we want, when we want it, where



.... the baby's first words, as important as pictures.

we want it. Intelligent planning is all that is needed. With a handy car inverter, tape recorded music can make even the long drive a relaxing, pleasant interlude without commercials. In addition, an increasing variety of first-class prerecorded tapes are available.

If your home is host to teen-age parties, tape recorded music for dancing in the recreation room is more than likely to win grudging praise from the younger generation.

If there are youngsters in your family who are studying (or who are likely to study) history, civics or current events, encourage them to tape record the great events of our lifetime. Historic speeches, reports of events that will effect our future can be preserved on magnetic tape for all time. These are exciting times with history being written every day. You and your children can have a seat, front row center. providing you use your tape recorder to good advantage.

Mother Goose rhymes, kiddieland stories, songs and rhythm music for children can easily be recorded on tape to be played and replayed for the toddlers in your family. Even if Junior insists on Dad reading a bed-time story each night, a recorder can help the neighborhood baby sitter get Junior into his crib with a minimum of bedlam.

Tape recorded sound effects can furnish an exciting background to accompany the kids as they play monsters from outer space, jungle explorer, or even cowboy and Indian.



Family vacation trips with tape recorder as well as camera can yield a big return in many pleasant hours of enjoyable memories. You're missing a big bet, too, if you don't let your tape recorder help you with your profession or work. Practice important speeches at home. With a continuous loop of tape help yourself memorize a sales presentation. Do office dictation at home on week-ends, if you must, instead of at the office. In addition to Listerine mouth wash and Wildroot hair oil, a tape recorder can help speed your business success by helping you deliberately cultivate a more effective, persuasive speaking voice. gain poise and self control.

Obviously, of course, is the use of tape to record your child as he progresses through life. A taped memory album of a youngster, developing from toddler into manhood, will be of incalculable value and will draw into insignificance your accompanying photo album.

It is equally obvious that recorded sound to accompany your 8 or 16 mm motion pictures and 35 mm slides will



make them many times more effective and exciting. A tape recorder is a gift for the whole family. All that is required is a small amount of imagination and you can develop a list of literally hundreds of applications for a tape recorder in your own home. Here's a starter: For Mom:

Background music to ease daily chores

Music for bridge and club parties

Music for dining, to make that painstakingly prepared steak taste even better

Music for romancing

An album on tape of the children

Record vacation travels

Daily exercise commands on tape for reducing

For Dad:

Sound commentary for motion pictures and slides Hunting and collecting unusual sounds

Office dictation

Memorizing and practicing speeches, sales presentations Voice improvement

Recording important sports events

Record favorite radio shows when absent

For the Toddlers:

Nursery songs and nursery stories

Night-time stories from absent dadies

For Medium Small Fry:

Practice music lessons

Memorize important lessons, poems

Practice parts for class play

Background make-believe sounds for outerspace, jungle and wild west playtime expeditions

Record important events and happenings for school reports

For Teen-agers:

Record dance music, hit tunes for listening pleasure

Record college classroom lectures

Party games and party fun

This is but a partial and incomplete list. But any single one of these uses will vield hour upon hour of solid enjoyment and profit.

Tape recorders are well-built, sturdy pieces of apparatus that even the youngsters can operate without danger to either the machines or the kiddies. If the tape should break through a bit of rough treatment in inexperienced hands, it need only be joined together again with a bit of splicing tape to be as good as new. Polyester, or Mylar tapes, are practically indestructible.

Like any instrument, the recorder should have its share of maintenance. You wouldn't think of driving the family car ten thousand miles without changing the oil. Neither should you expect the recorder to go on hour after hour without cleaning the record and playback heads. As dust accumulates on the heads, it will affect the quality of the recording. A pipe cleaner moistened with the solvent mentioned in the instruction book will clean the heads quickly and easily. If done regularly it pays dividends.

In fact, we'd suggest that you make a reading of the instruction book a first step after you unpack your recorder. It will tell you how to make the connections to your radio or TV, how to place the mike for the best pickup in making recordings and a host of other things you'll be glad to know about.

Present day recorders are as easy to operate as a box camera and you'll be amazed at the results you get on your very first try. Like any other human activity, the more you put into it, the more you get out. The more you use your recorder the more fun you'll have. Good luck and good sound hunting.



.... worldwide friendship, fun and fellowship is yours through your recoder.

OULD you like to be able to sit in your own room and at the same time carry on a friendly conversation with someone in South Africa? Or add to your collection of tape-recorded music? Or discuss hi-fi techniques with other interested and competent hobbyists? Or improve your use of another language?

All these things-and many more-are open to you as a recorder owner if you join a world-wide club of other recorder owners. In exchange for annual dues of from \$2 to \$4 these clubs will furnish you with a copy of their membership directory giving names, addresses, type of equipment, and hobbies and interests of members. Some of them also supply directions and helpful hints on making friends and exchanging messages via recorder, and two distribute quarterly news bulletins of personal items, technical hints, and the like-one free to each member, the other for the payment of an additional subscription fee.

Persons who are isolated-physically or geographicallyare probably the most grateful participants in this exchange of tapes. Such persons often find ordinary social intercourse difficult or impossible. Some are located in relatively inaccessible and sparsely settled areas with few congenial neighbors. Others, blind or crippled in some way, find it impossible to get out among people. But handicaps of isolation, blindness, and the like have no meaning to the owner of a recorder and cannot even be noticed by his tape-correspondents. And so, many people are obtaining most of their social contacts and are living most of their social lives by way of their recorders,

The firm friendships that result from just a few exchanges of recordings often amaze those who haven't tried voicesponding. Perhaps they are caused by the necessity for talking right along for the 30-minute length usually found most satisfactory by voicespondents. When the other person isn't present to answer back and to question or comment one has a tendency to put in a lot of the details of his thoughts and experiences that he might not in a person-to-person conversation. And by the telling of these details-and by being interested in similar every-day thoughts and events in the life of your voicespondent-you can soon get to know someone you've never seen even better than persons with whom you come in more personal contact.

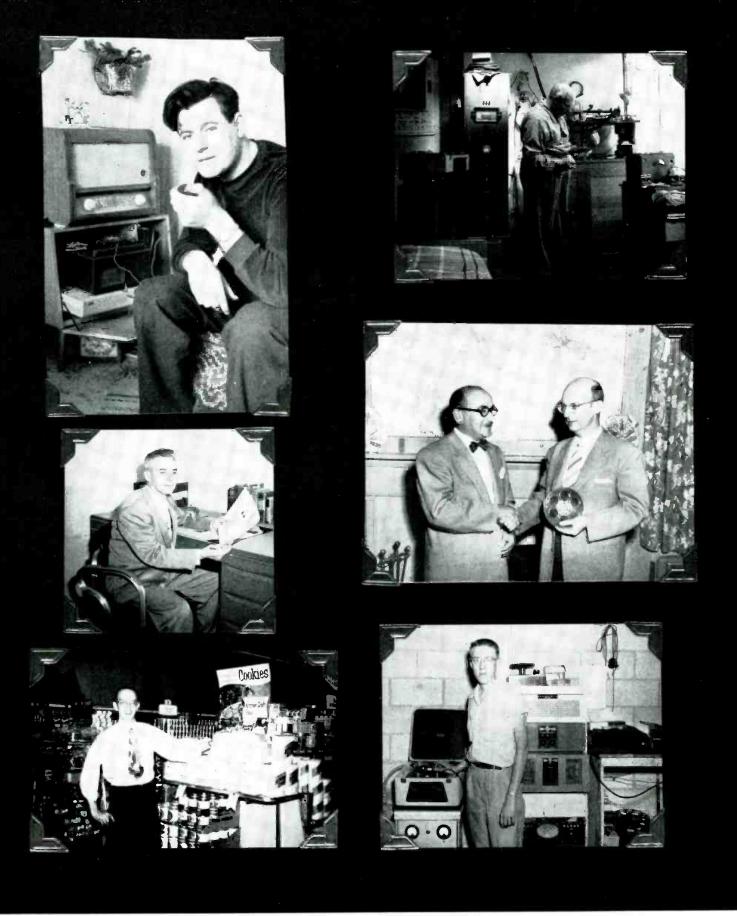
As an example of how well voicespondents get to know each other, take the case of one Illinois member who made friends with another member in Norway. So well did their friendship grow that soon the Norwegian made plans to fulfill a life-long dream and move to America, And his Illinois voicespondent sponsored his entry into this country, accepting full responsibility for him.

Romances have blossomed in voicespondence too. There has been one instance of a couple meeting by recorder, becoming interested in each other, meeting in person, and then getting married. Voicespondence is most useful to engaged couples who are temporarily separated. One such pair, both club members, carried on a very satisfying series of conversations to supplement their letters when the chap was drafted. He stopped by the homes of club members living near the various military posts at which he was stationed and used their recorders to listen to tapes from his fiancée and record answers to her. They are now married,

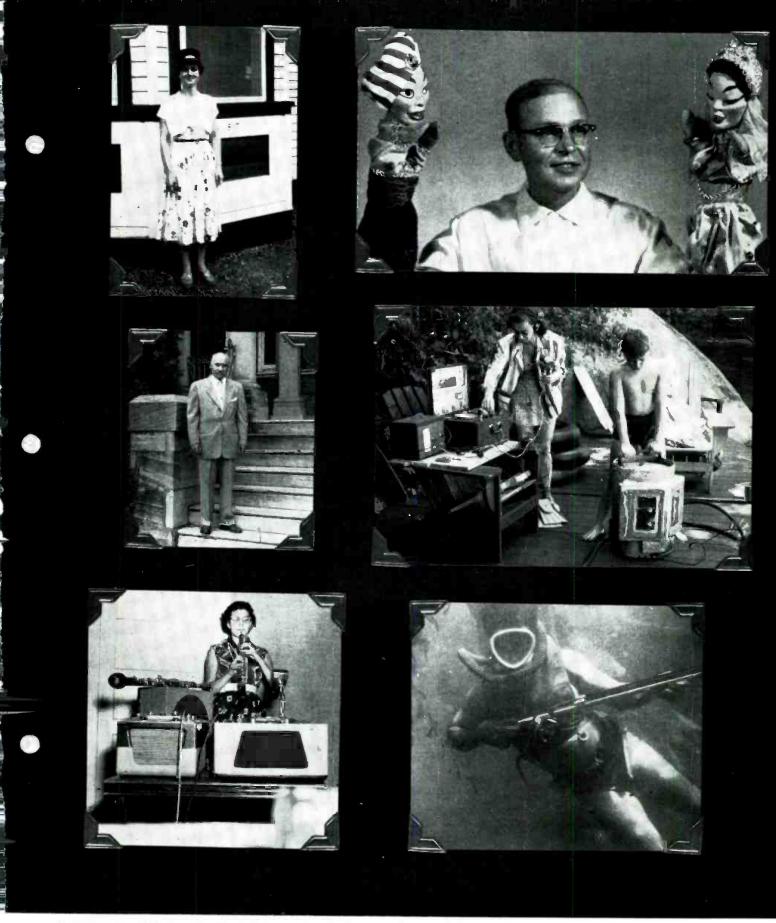
Many club members have rather specialized interests. Some who collect phonograph records exchange tape copies of their newest acquisitions with others so that they may each judge whether they want to acquire duplicates of the records for their own libraries. It is almost impossible to find time to listen to all the new recordings in a music shop, and many people do not live near such shops at all. So exchanges of copies enable the record hobbyist to plan his purchases more intelligently and more easily.

Some technically adept members prepare high fidelity tape recordings and stereophonic tapes which they exchange with their voicespondents. Others, gifted at amateur play-acting -or perhaps possessing a touch of the ham!-record short skits or playlets, usually without script, and send them to friends. Most times only the basic plot situation is decided on in advance and a few of the more obvious sound effects assembled. Then the voicespondent participants ad lib their lines, letting the whole skit develop as it may according to the imagination of the actors.

Many students and teachers join tape clubs so as to make contacts with people in other parts of the world for mutual enlightenment about customs, geography, culture, and the like. There is a "Thomas Jefferson English Club" in Brazil that gathers regularly to discuss American political freedoms



Members within a club have a variety of occupations and hobbies, and you are sure to find more than one person with similar tastes and interests to correspond with. Upper left: Voicespondent Kjell Petterson, Uttran, Sweden, records a tape to fellow member. Upper right: John Morris, Hobart, Tasmania, Australia, in his recording studio. Middle left: Dan Moran of Ohio, editor of the Ohio Bell Telephone Company's magazine, at his desk. Middle right: International membership is widespread. Gordon Harris of South Wales recently visited Voicespondence Club Secretary, Charles Owen, Noel, Va., who presented him with a souvenir recording. Lower left: Active member Len Decker of San Francisco is a grocery clerk. Lower right: Donald Stout of Oklahoma is a projectionist for a drive in theatre.



Upper left: One of the few girl railroad station agents and telegraphers is Luetta McNeil of Wirtz, Va., who voicesponds to help pass the lonely vigil she keeps. Upper right: Professional puppeteer Lewis Parsons of Shelby, Mich. Middle left: A. O. Grubb, professor of modern languages at Lincoln University, Pa., utilizes his club membership to obtain authentic accents from foreign members for his students to listen to. Middle right: Adolph Dittmar of N. Y., absent from picture, is underwater making a recording as his wife and son engineer the apparatus. Lower left: Dayna Larson of Okla. plays the Oboe and English Horn to recorded accompaniment. Lower right: Member Arthur Thomas of El Cajon, Cal., is a skin diver. For additional news about the clubs and where to join see the "Tape Club News," page 49 of this issue.



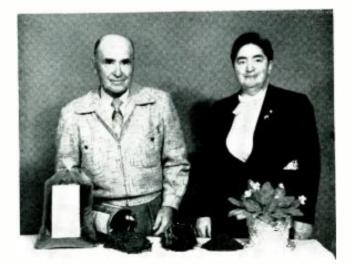
Left: Club members Walter & Stella Ziehm of Baltimore, Md., seem to have a different mike for each voicespondent. Walter is a civilian superintendent of a Signal Corps Field Maintenance Shop. Middle: Fred Potts of Gibsonburg, Ohio, is a general insurance agency proprietor. He also conducts a local radio program which he records at his office. Right: Roy Howard, Arcadia, Cal., records piano music from one of the thousands of player-piano rolls he owns. Roy is Special Fund Trustee for The Voicespondence Club.

and life—all in English—and to listen to tapes from groups in this country.

Tape recordings are sent anywhere in the United States or its possessions by third-class mail at the rate of 2 cents for the first 2 ounces and 1 cent for each additional ounce up to 8. Thus, tape reels up to 5 inches can be mailed without regard to postal zones. Postage for tapes weighing more than 8 ounces must be paid for at regular pound and zone rates. The Post Office has ruled that recorded tapes are not classified as first class mail even though they contain recorded notes of a personal nature.

Tapes sent to other countries may usually go by the "small packet" rate, but since the minimum charge for a small packet is 20 cents it is only slightly more expensive—and much quicker and safer—to send them first class. The rate then is 8 cents for the first ounce and 4 cents for each additional ounce. A green customs declaration form is affixed to the back of such first class packages declaring the contents to be a "personal tape recorded letter" of "no commercial value."

Mailing tapes in the boxes in which they are purchased will almost certainly result in the smashing of the plastic reels. Special corrugated cardboard mailers may be purchased, or a sheet of corrugated cardboard may be cut in the form of a cross by means of a razor blade, two opposite arms



Raising and teaching others to raise domesticated earthworms is the unusual hobby of George and Dorothy Hewett, of Alderwood Manor. Washington. These club members address garden clubs and write articles in connection with this interesting and profitable hobby.

folded carefully over the tape, and then the other two arms folded over them. This makes a very substantial package, especially if the tape is loosely wrapped in tissue paper first to prevent jostling about.

The technique of voicesponding is simple, but for best results a little preparation should be made. Brief notes should be jotted down as you listen to the other person's recording. Just a couple of words, a phrase, are all that are necessary. But notes of some sort must be made since otherwise subjects mentioned and thoughts engendered will be forgotten by the time you begin your reply. New subjects of interest to your voicespondent should be noted also.

Some people stop their recorders several times during the course of making a tape in order to collect their thoughts and plan their next subjects of conversation. Others find that after a little, practice they can talk right on through the recording with scarcely a pause.

Many couples find voicespondence the ideal hobby to share. Wives often are not interested in the technical aspects of owning and operating a tape recorder, but they can join with their husbands in this use of the machine. Thus, what at first might have been regarded as an expensive acquisition on the part of the husband soon becomes in fact the family recorder and a source of mutual delight. Recipes and patterns are discussed and exchanged and children add their words too to the family gatherings via tape. In recording such family conversations the participants are usually seated in a rough semi-circle and a single mike mounted on a stand is placed equidistant from them all. Passing the mike from hand to hand as various members speak is poor practice and results in a good deal of noise in the recording. It also tends to cause one person to monopolize the conversation for a while before passing the mike on to the next, so that the exchange is not quite so conversational and informal. Care must be exercised that only one person speaks at a time though, or else the recording will be difficult to understand.

Children participating in voicespondence gain greatly in knowledge of people in other parts of the world and find such knowledge stands them in good stead later in their school studies. They also acquire a poise in speaking and an ability to express themselves that proves most valuable.

If you are using your recorder only a little and want to get more out of your investment in it, if you like to make friends and are interested in other people, and if you want to broaden your perspective amazingly, why not join a recorder owner club? The dues are very small indeed compared with the benefits and pleasures. (See page 49-Ed.)



by L. L. Farkas

1

Photo by A. A. Bodine

Recording Carolers, Choirs and Organ Music

... keep this Christmas alive forever.

CHRISTMAS and the New Year means carolers, choirs, and organ music. And what better way to make the holiday cheer stretch far into the new year than to make tape recordings of all the songs and music played in the home, at parties, and in churches!

When the singing group is small, say three or four voices, this is fairly simple. The singers form a close semi-circle, with their mouths held anywhere from a foot-and-a-half to three feet from the face of the microphone. The lead voice is generally placed directly in the center, with the accompanying voices on either side. A quick check on the recorder, even of several chords, will tell you if the wrong voice predominates. Simply have the person move back a few inches until well-balanced chords are heard.

It does not matter 100 much whether you place the

group close or some distance away from the microphone; you should still be able to obtain a good balance. The difference will be in the perspective. With the singers grouped close to the microphone, their voices will sound very full and intimate. With them farther away, the voices will be less distinct but the blend will be softer.

As the group increases in size, you must move the microphone back. For instance, with a chorus of eight voices the microphone can be set from four to six feet away; with twenty-five singers the microphone will have to be pushed back ten to twenty feer. The exact distance depends upon the type of voices being picked up—whether they are soft or full—and the kind of room in which the pick up is being made. A pick-up in a live room, even if the reverberation is nor sufficiently large to cause distortion, will



Photo by A. A. Bodin

By arranging the choir in a compact group with the lightest voices nearest the microphone a clean-cut pickup can be made. It may be necessary for the organist to play softly if he overrides the voices when playing at normal volume.

sound louder than the same pick-up in a sound-proof room or one which has heavy draperies and rugs. So again make a test recording to set the working level of the group.

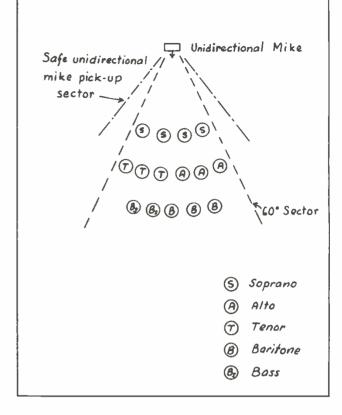
A good working level means nothing more than that the sound can be recorded with the volume control on the recorder set approximately at the middle of its travel. This permits adjustments either up or down during the recording to compensate for crescendos of pianissimos in the musical selection.

The normal arrangement in a large group is to place the sopranos and altos in the first or first and second rows, with the tenors in the center directly behind them, and the bass and baritones on the sides of the tenors or in another row behind them. However, this arrangement is flexible so that the sopranos and altos can also be placed in one or more rows in the right center portion of the mike beam, while the tenors, baritones and bass are placed on the other side.

The final determining factor is the recording. If the balance of the voices is good and the desired effect is obtained, then the set-up is satisfactory.

Thus far the singers alone have been considered. Generally though, carolers are accompanied by a musical instrument, usually a piano.

The simplest method is to locate the instrument or microphone in such a way that the sound from the piano will strike the microphone beam from the side. This may necessitate moving the instrument in fairly close. This indirect pick-up will permit greater control of the piano volume in relation to that of the voices. Since it is located in a low pick-up region, small changes in its position will cause fairly large changes in its volume. Thus the level of the accompanying piano can be easily adjusted so that it



A unidirectional microphone is most effective within an angle of 60° as shown. For a short distance outside the 60° section safe pickups can be made. The voices should be grouped within the beam as shown in the diagram.

complements but does not interfere with or override the voices of the singers.

The same type of set-up can be used with accordions, guitars, and other kinds of accompanying instruments, except that their distance from the side of the microphone will vary depending upon the intensity and fullness of their tone. The main thing you must watch is that the quality of the instrument is not radically affected.

Even though the discussion has been limited to the recording of carolers, the principles described apply equally to the pick-up of church choirs. Whether the singers in the choir perform *a capella* or with musical accompaniment it is still advisable to arrange them as indicated. Unfortunately there is often little chance to make such set-ups: the members of the choir are limited by the physical characteristics of the choir stall in the particular church. This precludes the possibility of making extensive changes in the location of the singers.

5

To overcome this difficulty, it may be advisable to resort to a more distant type of pick-up. Still such a distant pickup presents problems, particularly in a church where reverberation is large. The high ceiling, the stained windows and masonry walls, the polished wooden floor: all of these contribute to make the room live so that sounds echo easily. If the choir is picked up from too distant a point, the tones of the voices reach the microphone only a short interval before their echo; and since different tones will also have different echo intervals, the resultant recording will be highly distorted. Some of the voice frequencies, particularly in the bass tones, will be missing while some of the highs will be accentuated. You may then obtain a recording that resembles some of the short-wave musical programs received from a great distance during conditions of heavy atmospheric fading.

In some cases it is possible to arrange the group so that a closer pick-up can be used. A microphone set ten feet from a fairly large choir, with its head raised to approximately ten feet and tilted down toward the singers, should produce a solid pick-up in which the echo is reduced.

The close set-up for picking up the choir does have one possible disadvantage. In obtaining full and intimate tones without echo, the live yet slightly hazy chords characteristic of church pick-ups will be lost. The choir will sound like a chorus in a studio and for many of us its appeal will be gone. So, in spite of the drawbacks, some of the reverberation must be kept in. This may sound contradictory: after telling you how to exclude echoes, you are now advised to retain them. However, this is no paradox: the explanation lies in the amount of echo used. Too much will definitely cause distortion while just the right amount will characterize the choir giving it the desired quality.

The safest solution to obtain the correct type of pick-up lies in compromise. The members of the choir are asked to group themselves as close together as possible. This tends to approximate a point source which both increases the overall level of the choir at the microphone and at the same time prevents the dispersion of the various voices. Then, the microphone is moved in toward the singers until the recording shows no objectionable echo.

One point to remember if you happen to check the choir on a recording when the church is empty. During the actual services, once people are in position, the overall echo of the room will be decreased. This occurs because the clothing of the persons present acts as a sound-absorbing agent and thus to a certain extent deadens the room, reducing echoes. For that reason a reasonable amount of echo can be tolerated on test recordings made in a relatively empty room without fear of causing distortion when the performance before an audience is recorded.

The choir pick-up problem is complicated slightly when it must be recorded with organ accompaniment. Perhaps it may be well first to consider the pick-up of an organ alone. For a good organ pick-up, the microphone should be set from fifteen to twenty feet away from the pipes. At that distance the tones can be recorded without any objectionable mechanical noises; and the microphone is still close enough so that excessive reverberation is omitted.

When organ and choir must be recorded together, they generally can be both picked up on the same microphone. It is true that the microphone placed for best results with the choir may not pick up the organ tones to best advantage, particularly when the organ pipes or shutters are located in a different part of the church. This condition occurs when the choir is located close to the altar and the organ pipes are located in the balcony at the rear of the church. If you have only one microphone the best you can do is to get a good pick-up on the voices and let the tones of the organ come in as they may.

With two microphones, one unit may be used to pick up the choir while the other can be set in front of the organ pipes. The voices and organ tones can thus be controlled individually.

If the recorder and mike must be hidden so the church holiday setting will not be disturbed, the microphone can always be set at the side of the pulpit so that it is inconspicuous; it can be hung close to or behind a drapery; or it can be camouflaged by decorations. And the cable can be pushed against the wall, under rugs, or even run under the floor. By using your ingenuity, you should have little difficulty in masking all your equipment from the general view.

All in all you can probably summarize some of the important points in picking up carolers, choirs, and organ music for recordings as follows:

- 1. If at all possible try to make a test recording ahead of the performance or service.
- 2. Get a good balance of the voices and between voices and accompanying instrument.
- 3. Keep reverberation down.
- 4. If both voices and instruments cannot be picked up equally well, favor the voices.
- 5. Choose a close pick-up in preference to a distant pick-up with excessive echo.
- 6. If you must make a pick-up where there is excessive echo, record the selections at low level.

These hints will not insure you perfection, but they should help you obtain good recordings of holiday cheer.

In making outdoor recordings the mike should be as close to the group as possible to cut down on background noise. If possible, the mike should be placed high and tilted down toward the group to balance the voices. The singers should be arranged so that the voices farther back still have a clear path for the sound to travel to the microphone. Music books or sheets should not be held in front of the face. blocking the sound.





TAPE YOUR WAY To folk dance fun

hy

Rainer F. Meyerowitz

••• with the music and calls on tape you can join the dance.

As THE Scotsman would say, nae doot aboot it: Almost all that I have done with my tape recorder can be accomplished without this revolutionary little machine, provided you have on hand 1) lots of that green stuff to buy a P. A. system, several hundred records, a turntable, and record cases; 2) a small truck for transporting all of this paraphernalia; and 3) six—well, at least three!—husky men to tote it wherever you need it. If you can meet these requirements, a tape recorder may not appeal to you. If you can't, you probably belong to the ordinary-mortal class to which I belong.

Three years ago friends of mine dragged me to the fourth annual Folk Festival sponsored by the Syracuse University Outing Club. Folk dancing was a closed book to me (indeed, all dancing was!); and I was duly impressed and aroused by the lively folk dances from many different countries. What really excited me, however, was the sight of a pretty girl whirling around to a fast polka; I would have given a hundred dollars then and there to be in her partner's place.

The very next day I began a gruelling course in the art of dancing the polka. For six weeks I endeavored, three or four evenings a week, to master the hop-step-step-step of that particular dance. At the end of this period my incompetence was so alarming that people pointed at me, confiding to one another: "That poor fellow will never learn to dance!" Visions of pretty girls succumbing to my charms via the dance, however, filled me with grim determination. By the time the next year's festival rolled around, this determination had born fruit to the extent that 1 participated in the demonstration by the Syracuse group—1 had "arrived"!

When the sixth festival approached, the group decided to do a medley of six Israeli dances. This is where the tape recorder became indispensable; as it happened, I possessed the only available one. We planned to do four sequences



An Israeli Medley of Folk Dances is performed by barefoot dancers in the Women's Gym of Syracuse University. Dancing four sequences, the first two in one direction and the last two in the other, a very effective pattern is achieved. Right: The author and his partner, Sandra Rosebrook, clasp hands in the performance of one of the folk dances. In addition to finding and recording authentic folk music, the dancers enjoy dressing in native attire for each particular number. Below, top: Around she goes as the author twirls his partner while dancing the Hambo, Swedish national dance. Below, middle: A couple demonstrate a step for Mr. Meyerowitz shown kneeling beside his recorder. Folk dancers eagerly welcome newcomers into their fold and are happy to have them copy their dances. Below, bottom: One of the many variations of the American Square Dance. This is an all-time favorite of all folk dancers.

2









each of six dances, dancing the first two sequences in one direction and the last two in the other, with an inner circle reversing the whole process; we achieved a pattern that brought the house down. Not only would it have been impossible to avoid awkward pauses between dances if records had been used, but it would have been out of the question to include all of the dances that we used because from snme of them we had to take the last four sequences to achieve proper musical effect. Using my recorder, the transitions were made smoothly and noiselessly, with just enough of a pause so that we could step into position for the next dance. I might mention here that I then had a different recorderone with manual rather than electronic controls. The "engineer" cnuld nnt start the machine despite previous instructions; and, after a lengthy silence during which nothing happened, I had to dash back across the dance floor. The crowd enjoyed this immensely, but I'm glad now that I have a recorder with electronic controls.

My equipment now consists of one model T-700 Revere tape recorder and half a hundred tapes. All but three of the latter provide me with classical music, folk songs, poetry, and drama and thus have nothing to do with the topic under discussion; therefore, I can state flatly that all you need for what I'm going to describe is three or four tapes. Even one will suffice to give you a flying start. The T-700 recorder retails for \$225.00. It incorporates two things which to my knowledge are not found together in any other machine sold at this price or less; one of them is essential, the other is helpful but not absolutely necessary. Your machine must have an index counter; mine also has a built-in hook-up by which you can use the mike and speaker as a P. A. system while the machine is in "stop." The T-700 amplifier is powerful enough to fill a good-sized hall or auditorium. Anyway, figure on \$200-\$250 and you're in business. Thnse of you who already have such a machine need only invest in an extra tape.

On nne standard seven-inch reel you can place about 45 folk dances, while on the new Long Playing seven-inch reel there is room for mnre than 65! Prices for reels of this size will vary all the way from \$2.50 to \$8.50 (L.P.). On the other hand, the price of records whild be around \$50-\$60 for 45, many folk dance records selling for more than \$1.50. You may ask, where the devil am I going th find someone with folk dance records? Well, your community may have a university but no folk dance group, for they are often few and far between. Don't give up, however. Instead,



Swing your partner and dosey-doe. Even bystanders tap their feet when the dancers execute the Square Dance. Fun and friendship at these affairs is as contagious as the measles. The various steps and change of partners creates rare good fellowship and is better than any format introduction between new found friends.

investigate the local or nearest YWCA or YMCA; most of them do some sort of folk dancing, usually with emphasis on the American square dance. If they don't dance themselves, at least they will be able to tell you where to look farther afield. Local ethnic groups may provide a store of records, dance instructions, or even "live" music to tape. If you want to keep some records as originals while you work with the recorder, you will find that almost every major recording company has a series of folk and square dances both at 78 and at long playing speeds; the Victor-Michael Herman series is a good example of this. At least one company (Folk Dancer label) puts out only folk dances. Local square dance callers (with prior permission) may even be flattered to have you record their calls.

If you live near cities like New York (Folk Dance House) and Washington (Washington Folk Dance Group) or near the West Coast (The California Folk Dance Federation) you will have any number of folk dance centers to go to. If you don't, you'll probably discover that you live within a hundred miles of some folk dance activity, for it is a widespread, if thinly-scattered disease. Once you have found a source, you'll have no difficulty in getting permission to copy dances—folk dancers are invariably so glad to make one more convert that you'll get the impression that you are doing them a favor. Did I—by any chance—hear you say that-100 miles is a long way to go to do some folk dancing? Brother, once you've been infected by this malady, you'll drive three times that distance to a folk dance and think nothing of it!

At present I have approximately one hundred folk dances trom about twenty countries. In the storage space of my recorder there is room for six seven-inch reels or roughly 550 dances. If you type them up in single spacing, you could put all their titles inside the lid, side by side. So you see, the whole works are literally contained in one box. Once you have taped a record its quality will never alter though you will have to keep the "head" of the recorder clean and check it at long intervals for alignment and, eventually, replacement. Your "records" will never break or warp short of your leaving the tape on the furnace or allowing Junior to go to work on it with the magnet he got for Christmas (in which case you can start from scratch); no matter how boisterous the dancers may become, no amount of stomping will jar the music as it undoubtedly would with a record and needle. The advantage of owning a tape recorder should be clear.

As I have hinted before, though, no matter what make of tape recorder you buy, if you wish to use it for folk dancing you must have an index counter on your machine. This little gadget resembles a car odometer; setting it at 000 when you start recording a tape (electrical recording eliminates highvolume distortion), you note down whatever number appears at the end of each dance on your index. From then on, by skipping the tape until you come to the number preceding or following (whichever system you prefer) the dance you want, you can pick out any dance anywhere on the tape with precision. Without an index counter you would have to guess and stop and start until you found it-an extremely annoying and time-consuming process. If you happen to be working with a group of children such pauses may lead to a minor revolution! It is in working with children especially that the P.A. hook-up on my Revere has come in handy; in between dances and while teaching the steps to a dance you can save your voice by using the mike. My partner and I still remember one very sad session when we were using a regular P.A. system to teach teen-agers and the mike broke down; by the end of the evening we could hardly whisper condolences to one another. The limitation on my recorder.

however, is that the machine must be in stop' for the mike to be used; in other words, you cannot play dances *and* talk into the mike at the same time. There may be machines with which this is possible; perhaps it will be standard or optional equipment on future models. If you do find such a machine, however, remember that the index counter is much more important.

2

In the months that followed our first performance of the six Israeli dances, we demonstrated this medley and taught other folk dances to various school and community organizations. We have demonstrated folk dances for old peoples homes and to Girl Scout groups, to clubs with an audience of two or three dozen people and at the 1954 Niagara Falls Folk Festival for a crowd of several thousand people. The latter demonstration was held outside in Prospect Park only a stone's throw away from that section of the cliff which broke off, only a few days later, and hurtled into the whirlpools at the base of the falls. On less exciting occasions we often had two demonstrations scheduled for the same evening, whereupon we split the chores between the tape recorder and the Outing Club's more cumbersome P.A. system.

This last winter I took a trip to Florida, coming back through Louisiana, Alabama, and Georgia. In Florida I was able to add something new to the monthly square dance night in the Everglades National Park by teaching the rangers and their families a few folk dances. A stay of several days with some friends in Georgia was enhanced when I discovered a girl who could dance the Hambo, the Swedish national dance which is the favorite of folk dancers everywhere. Indeed, finding a partner for the Hambo in an unexpected place is like finding water in the middle of a desert.

Actually, a tape recorder can be used in combination with these dances as a key to unlock any number of pleasant (and possibly lucrative) doors for you and your friends. It is a means of finding inexpensive and convenient recreation within the home; neither children nor adults feel awkward learning dances that are so much fun to do. Churches, schools, and other community organizations would find this both a wholesome and an educational activity. Excluding travel, I can think of no better medium for creating interest in and understanding of other countries and their customs, including their geography, languages, and crafts; not all of us can afford to travel, but we can all afford to dance.

Once you have acquired a small repertoire of dances you may want to offer yourselves out as a demonstration group at local functions; a series of such demonstrations at a reasonable fee would soon return your investment in equipment. You don't have to be a prima ballerina to demonstrate these dances; the most important thing to remember is to enjoy your dancing and to let the audience know that you're having a good time. While you should do the dances correctly, to my mind spirit is more important than perfec-

The author getting his tape recorder ready for action. Tapes for a dance session can be stowed in the recorder. Note how the tapes are cataloged on a sheet in the lid of the recorder. This makes it easy to locate any number needed.

tion. For such demonstrations it is handy (and looks quite professional) to have a special tape with your demonstration dances in sequence and separated by pauses that are long enough for you to announce the next number or to return from whatever spot on the floor you have happened to reach during the course of the last dance. You'll find that a simple costume will enhance your dancing in exchange for a minimum amount of time and money.

Probably the biggest return on your original investment will be received in the form of fun and good fellowship. Once a tape starts unrolling at a folk dance session you just can't miss: there are dances for couples, trios, all boys, all girls, and no partners; there are formations of circles, squares. broken lines, and whatever contours your basement or hall has to offer. Friendship is so contagious in such a setting that the philosopher, Bertrand Russell, used it as an illustration in his Nobel Prize acceptance speech. "I have never," said he, "heard of wars that started in dance halls." To that we say a hearty "Amen."

The idea of combining a tape recorder and folk dancing has two big advantages over the old ads which promised to teach you to play the piano so that you could be popular: one—it's easier to play a tape recorder than a piano; and two—it's more fun to dance with a partner than to keep company with a piano! I recommend that you start recording those first simple dances; you'll be a confirmed addict within a very short time.

Gloria Gets Her Tape Recorder

Little Gloria Lockerman whose spelling ability enabled her to win \$16,000 on the \$64,000 Question program wanted four things: a new bike, a subscription to Little Lulu comic books, a TV set and a tape recorder.

The night she won the \$16,000 she was presented with all four. Still clutching her prize check she happily accepted a new F-M-E recorder from Robert Schlanger, while Joseph Hards of the Magnetic Recording Industry Association looked on, As all recorder manufacturers were willing to donate a machine to the plucky speller, their names were put in a hat and Federal had the honor of making the presentation. She also received lots of tape from MRIA members and a subscription to Tape Recording Magazine.



Gloria Lockerman and recorder.



by

Jean Cover

Pre-recorded tape can make your Christmas merrier.

THERE is no need to check the calendar to know that December 25 is rapidly approaching. That angelic look on the children's faces as they suddenly become very good little girls and boys, and the worried expression on Dad's, as he contemplates the empty feeling of a flattened wallet, are pure indications that it won't be long now.

You can find Mom in a thoughtful mood as she ponders what to give whom. As a suggestion for a different and most appealing gift, why not add pre-recorded tapes to your list. Some excellent and most appropriate Christmas selections have been prepared by the more than 20 recorded tape manufacturers.

Whether you prefer popular selections, remembered favorites, or numbers of a general religious character, you will find them all on pre-recorded tape.

Seasonal releases like that issued by the newly established independent Console Recording Studios, which features melodies such as "Silent Night," "Jingle Bells," "White Christmas," and "Let It Snow," are ideal for Yuletide parties or just plain good listening.

Perhaps your friends and relatives fortunate enough to possess a recorder would prefer varied tapes such as "Basil Rathbone reading Edgar Allan Poe's The Raven," or "The Investigator," both of which are listed in the Recorded Tape of the Month Club catalog. Whatever you choose to give, the recipient will most certainly be pleased with the gift.

Carols are at their best when reproduced on long lasting magnetic tape. Who could resist humming along when that delightful bard of the organ, Hack Swain, renders his splendid interpretations of them. His handling of sacred melodies is endowed with a fine style of presentation. This treasure of recorded musical gems is found in the Livingston collection of releases.

The quality and presence of the Roger Wagner Chorale's renditions on Alphatape reel #5 is truly a symmetry of harmony. It is opened and closed by a wonderful Cathedral bell recording. Alphatape also offers a reel of 12 pop Yule selections presenting music by Gordon Kibbee. Tapes such as these may be used to enhance school Christmas pageants as introductory or background music. Recommending this to the teacher, and possibly also lending your recorder for the event, is even more skillful psychology than the traditional red apple.

Reels of a religious nature afford a feeling of serenity and impart to the listener an authentic Christmas spirit. Perhaps the pastor of your church might wish to include some of the taped hymns as part of the holiday services.

Getting Junior to bed on Christmas Eve is like pulling a pup away from a T-bone steak. You will find, however, that the promise of listening in bed to "The Legend of Sleepy Hollow" as read by David Kurlan on a Phonotapes reel will make going to bed seem more attractive.

Trimming the tree is a gala affair and it will be even more so when highlighted by the Caroleers or the McKay Singers' charming renditions of well-known carols, as issued on A-V tape reels. "A Music Box of Christmas Carols," "A Merry Christmas from Doug Duke," and reels of holiday melodies featuring Robert Owen, organist, are also available from this library.

An old-fashioned singing fest at Christmastime is always fun and a reel of uninterrupted tunes such as Tape Toons Special Christmas Reel No. 1, which contains a choice assemblage of carols to please all the family, fills the bill as accompaniment.

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Just before the lady of the house rings the dinner bell for that extra scrumptious holiday meal, give the "Music for Cocktails" release of Recorded Tape of the Month Club a whirl. Each sip of that delectable concoction will scem just a little extra pleasing.

And while stuffing in the turkey and trimmings, spin RCA's "Music for Dining" reel. Although no one needs any coaxing to dig in, it is most appropriate dinner music.

"The Sleigh," by Kountz, as rendered by the John Halloran Choir on a Webcor tape record is a lovely arrangement. Close your eyes as you listen and you can visualize the swish of the runners as they sink into and cut through the even film of snow, leaving two straight imprints in their wake.

As another gift idea, we might mention that a membership in one of the tape club plans, designed to give you a savings on all tape records, makes a fine present for your hi-fi pals or kin. Information regarding this is found in the ads of manufacturers appearing in this magazine.

Most all pre-recorded tapes are suited to the majority of recorders, and are available on 4, 5, 7 or $10\frac{1}{2}$ inch reels, single or dual track, recorded at speeds of $3\frac{3}{4}$ or $7\frac{1}{2}$ inches per second.

Prices cover a range of from \$3.95 to \$12.95, or higher if you wish to look into stereophonic tapes, depending upon which specific type you are interested in purchasing. These tapes will last for years, and "Rudolph the Red-Nosed Reindeer" will sound just as saucy December 25, 1975, as it does in 1955.

Santa's big bag should contain more recorders this year than ever before. Quite naturally, it should follow then that it will also contain more pre-recorded tapes.

These tapes are available at leading photo, music and parts jobbers' stores. We would suggest that you write immediately for the catalogs of manufacturers advertising in this issue, so that you can make your selections, place your orders, and get the tapes in time for Christmas. You'll find your investment a worthwhile one indeed.



(Continued from page 18)

FISHER AUDIO CONTROL



Fisher Radio Corporation, 21-21 44th Drive, Long Island City 1, N.Y., has announced their new Master Audio Control, Series 80-C. The 80-C features complete mixing and fading facilities for from two to five channels, tape input to operate directly from tape playback head, sixteen combinations of phonograph equalization, an accurately calibrated loudness balance control, push-button channel selectors and individual channel indicator pilot lights. The series has a frequency response-uni-

form, of 10 to 10,000 cycles, and is priced at \$99,50. Mahogany or Blonde cabinets are available at \$9.95 each. For additional information, write to Fisher Radio Corporation, above address.

TURNER LAVALIER MIKE



The Turner Company, 948 17th Street, N.E., Cedar Rapids, Iowa, has announced a new dynamic lavalier microphone dubbed Model 58. This new model has the new Turner "Dynaflex" diaphragni, response of 60-13,000 cps, a level of -57 db at high impedance, and it is wired for high or low impedance by matching of the proper conductors at the terminal end of the cable. It is supplied with neck cord and support clip and has long, supple, kink-resistant Celanese braided cable. For complete information and price, write to The Turner Company, above address.

PRESTO SR-27 UNIT



Presto Recording Corporation, P. O. Box 500, Paramus, N. J., has announced a new, two-speed recording unit designated the Presto type SR-27. It consists of a tape transport mechanism and a 10-watt amplifier, each furnished in a separate carrying case. Features include three individual magnetic heads, 71/2 and 15 inches per second speeds, three separate motors, self-adjusting and selfaligning brakes, frequency response up to 15,000 cps when operated at 15 ips, with signal-to-noise ratio better than 50 db, and flutter held to 0.15% RMS. It contains microphone and playback pre-amplifiers, a power supply, and two small speakers for low-level listening or for monitoring the recorder. The combination is sold at a list price of \$588. Additional details available from the manufacturer,

TAPE RECORDERS



MOST OF THEM LOOK ALIKE . . .

... But there are big differences between tape recorders—in capacity, performance, versatility. That's why it's often hard to know if you're getting just the right one. It's especially difficult it you have only one or two brands from which to choose. At Boynton Studio you'll find fifteen fumous makes of tape recorders ... rang-ing from inexpensive units for the home to the finest professional equipment. Must important each unit is illustrated

to the infest professional equipment. Most important, each unit is illustrated and fally described in an altractive brochure which is yours for the asking. Technical specifications, prices... every-thing is shown to give you a reliable means of comparison between brands..., to help you in making a wise choice.

Be sure to send for a copy of this valu-able and interesting brochure. No obliga-tion, of course.

BOYNTON STUDIO 10 PENNSYLVANIA AVE. DEPT. 311 TUCKAHOE, NEW YORK





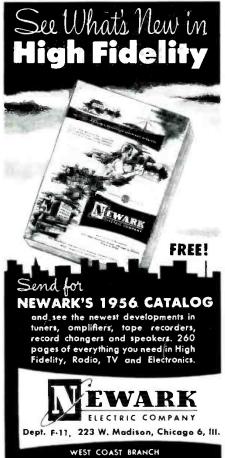
Spring-Motor Battery-Operated Portable Tape Recorder

Now you can consistently moke professional recordings under the most gruelling field conditions. Tapes will faultlessly play back on all professional and home recorders. Ruggedly designed for maximum dependability and topnotch efficiency. Combines unlimited versatility of performance with extreme simplicity of operation. Choice of fourteen models available for every conceivable application.

Incorporates a multi-purpose VU monitoring meter for precise setting of recording level without earphone monitoring. Meter also accurately indicates condition of "A" and "B" batteries. Five single speeds as well as two, three and 4-speed models available. Units weigh only 19 lbs. with batteries and measure $\delta h_2'' \ge 9 h_2''' \ge 14 h_1'''$. Higher speed models. meet NARTB standards. All recorders are guaranteed for One Full Year.

For complete technical specifications and direct factory prices write to Dept. TR:

AMPLIFIER CORP. of AMERICA 398 Broadway, N. Y. 13, N. Y.



WEST COAST BRANCH 4736 W. Century Blvd., Inglewood, Calif.

CONTEST WINNERS

The lucky winners of the recently conducted contest held by Audio Devices for the best manuscript describing the use of a recorder, both at home and for church activities, have been announced and are as follows:

Home Recordist Contest:

- 1st Prize: Robert W. Luebke, Green Bay, Wis.
- 2nd Prize: Erik Lindgren, Lund, Sweden.
- 3rd Prizes: Richard W. Douglas, Evanston, III. Mrs. Marjorie Matthew, Dallas, Texas. Haskell Heiligman, M.D., Overton, Texas.
- Church Recordist Contest:
 - lst Prize: Rev. Wm. R. Phinney, Stamford, N.Y.
 - 2nd Prize: Rev. Robt. F. Ramm, Northport, L.L., N.Y.
 - 3rd Prizes: V. Alex Bills, Amarillo, Texas. Rev. John K. Hammon,
 - Hopesdale, Mass. Rev. Paul J. Beeman, Chicago, Ill.

RCA TWIN-CONSOLE



RCA has introduced it's Model 6HF1 twin-console unit composed of a hi-fi tape recorder, a 3-speed record changer and AM-FM radio, with four speakers in a separate cabinet. The recorder has 71/2 and 33/4 ips speeds, and is in a roll-out drawer, as is the phonograph. Undistorted output is 20 watts with maximum output of 25 watts. through a range of 30 to 20,000 cycles. The phonograph uses transistor circuits, has a 4-pole, 4-coil motor, magnetic pickup, and a rubber turntable which absorbs vibration present. The FM section of the radio covers a range of 30-15,000 cycles. The speaker cabiner contains four loudspeakers composed of a 15" woofer for low frequencies, a 5" speaker for mid-range, and two 31/2" speakers for high frequencies. This unit is available in traditional mahogany or modern light finishes such as natural walnut or light rift oak, and it is priced at \$1600. For further information, write to RCA, Camden 2, N.J.

CORRECTION

An error was made in the last issue regarding the Ampex Model 612 tape phonograph. Instead of reading "25% flutter and wow," it should have read "0.25% flutter and wow."



BACK ISSUES AVAILABLE Articles of Lasting Interest 35_C Each—Any 3 for \$1.00 ISSUE HIGHLIGHTS

Volume 1, No. 1: How to Record Your Voice. Secret Recording. Add Sound to Your Movies, Full Range Recording, Join a Tape Club. Volume 1, No. 4: What a db Is.

Volume 1, No. 4: What a db Is. Starting a Tape Library. Recording Choral Groups.

Volume 1, No. 5: Recording European Trip, Recording In Your Car, Portable Recording, How to Record Dramatic Skits.

Volume 1. No. 6: Analyzing Noise, Recording Fun, Les Paul & Mary Ford Recording, Recording Dramatic Skits—Part II. How Your Recorder Works, Choosing a Mike.

Volume 2, No. 1: Radio Tape Network. Choosing a Mike-Part II, How to Erase Tapes. Volume 2, No. 2: Building an Elec-

Volume 2, No. 2: Building an Electronic Mixer, Mike Stands, Orchestra Recording.

Volume 2, No. 3: Music Can Make Your Mood, School Use of Recorder. Orchestra Recording, Tape Recording Glossary.

Volume 2. No. 5: Tony Schwartz— Master Recordist. How to Avoid Hum, Capturing Yesterday's Music. Build This Recording Center, Thesis on Tape.

Volume 2, No. 5A: Sounds to Keep Your Trip Alive, Recording Bands Outdoors. Capturing Insect Songs.

Order from: Back Issues Department Tape Recording Mogozine Severna Park, Maryland

TELECTROSONIC PORTABLE



Telectrosonic Corporation, 35-18 37th Street, Long Island City 1, N. Y., has introduced a new light-weight portable tape recorder, model 556. This machine provides simple operation with dual track recording at 33/4 ips; fast forward and rewind; essentially flat frequency response; full hour recording on a single 5-inch reel; recording level indicator, and easy threading for foolproof operation. It is accompanied by a crystal type microphone with convenient stand; cord for recording connection with radio, phonograph or telephone; 5-inch reel with tape, pickup reel and a-c line cord. Weighing slightly less than 16 pounds, model 556 is supplied in a two-tone airplane cloth, luggage type carrying case. For complete specifications and price, write to the manufacturer.

PRESIDENT GETS TAPED BIRTHDAY GREETINGS



Stan Hamilton, WGMS staff announcer, mans the mike and recorder as the public and officialdom tape recorded their birthday greetings to hospitalized President Eisenhower.

WGMS, Washington's Good Music Station, provided the means for both government officials and just plain citizens to send birthday greetings to President Eisenhower. Staft personnel manned tape recorders in front of one of Washington's leading downtown department stores and passersby were inivited to step up and express their greetings.

The tapes were rushed to the WGMS studio during the day and a selection from the tapes was broadcast every quarter hour. At the conclusion of the broadcast day, the tapes were flown to Fitzsimons Army Hospital in Denver. M. Robert Rogers, general manager of WGMS, said the station had planned this day of special broadcasts long before the President was stricken. Among the officials adding their voices to the tape were the Secretaries of Cabinet Departments.

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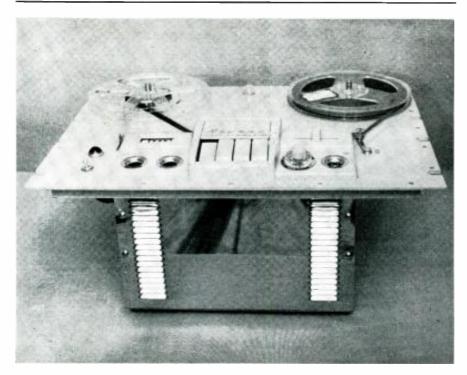


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NEW PRODUCT REPORT



REVERE T-11 CUSTOM RECORDER

. . . designed for custom home installation. Solenoid operated, index counter, takes $10\frac{1}{2}$ " reels, monitor amplifier, push button control.

THE Revere T-11 Custom Recorder is a unit which is designed for mounting in the home music system. It has no carrying case but the mechanism is protected by a plated enclosure which prevents tampering. Adequate ventilation is assured by the louvers in the metal of the case.

The size is such that it can be mounted directly on standard relay racks or the home craftsman can make his own installation in a cabinet or existing hi-fi setup.

We found the recorder to be a very versatile unit. Outputs include a monitor output delivering 2.5 watts of undistorted sound with a maximum output of about 5 watts. A pre-amp output is designed to connect directly to high fidelity amplifiers and operates in the playback position only with a 1 volr output at constant volume. The volume must be controlled on the final amplifier if this output is used.

A microphone input is provided as

is a radio phono input to make recordings off the air. In the music system, the phono may be fed into a pre-amp and thence to the input on the recorder or the phono or radio may be plugged into the microphone jack. An AM-FM tuner is also fed into the pre-amp and thence to the recorder. The pre-amp output of the recorder is fed into the pre-amp, which in turn drives the power amplifier and speaker system. The monitor output on the recorder can be used to power either headphones or a speaker.

During our tests the unit was set up in a local supermarket which has a floor area of 2500 square feet. It was connected to a speaker, directly from the monitor jack without benefit of an external amplifier. Using standard prerecorded tapes, the volume of the output was more than sufficient to cover the store. In fact, we overheard one lady tell the owner that the music was too loud. So don't let the word "monitor"



Product: Revere T-11 Custom Recorder

Price: \$264.50 including cords, reel hub adapters, plugs

Manufacturer: Revere Camera Company, Chicago 16, 111.

fool you . . . there is plenty of soup there for the average room.

Through the use of reel adapters which are supplied with the recorder. the unit will take from 4" to $10\frac{1}{2}$ " reels. The recorder is single speed, $7\frac{1}{2}$ inches per second and is dual track. At this speed two hours of music can be had on a $10\frac{1}{2}$ inch reel.

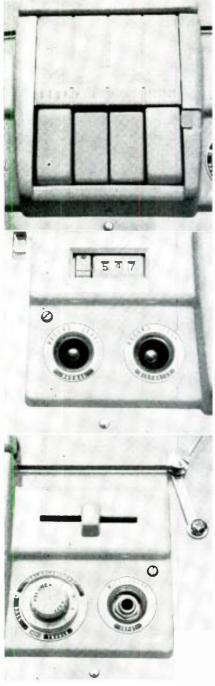
The controls are solenoid operated by function keys which include "Stop," "Play," "Speaker" and "Record." Any two may be used in combination which adds versatility to the recorder. For instance, depressing the Stop and Speaker keys enables the recorder to be used as a P.A. system. With the manual stop lever held in stop position the Record key may be depressed and the recording level set without running tape. Recording starts instantly when the lever is released. This lever is also useful in eliminating commercials when recording from the radio.

By depressing the Stop and Play keys together the tape may be reeled manu-

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The recorder may be used either horizontally or vertically or at any angle in between. These cleverly designed reel shafts hold the reels securely in place.



Top: the recorder is operated with pushbutton keys grouped together. Center: on the left side of the recorder is the odometertype counter for accurate selection finding and the recording level neon lights. At the top left can be seen the manual stop lever. Lower: fast forward and rewind is controlled by the sliding knob. It is interlocked with the key controls. The volume and tone control is combined into one unit. Tension arm at right keeps tape running evenly.

ally for editing. By removing the head covers the exact spot to cut the tape may be determined.

The tone control works on playback only. It controls only the high frequency cut-off on the pre-amp output, but controls both highs and lows on the

	RECORDER SI 334	ERIAL	
% PE	AK WOW .1		
	PREAMP. - RELATIVI CY RESPONSI	E OVERA	
1000	Cycles	0	db
40	Cycles	-3.5	db
50	Cycles	-3	db
100	Cycles	-1.5	db
400	Cycles	-3	db
4	KC	-1.5	db
10	KC	-1	db
15	KC	0	db
16	KC	0	db

With each recorder is furnished a chart showing how that machine checked out of the factory. This is a reproduction of the slip received with the unit tested.

monitor amplifier. The "Hi-Fi" position on the control provides the widest range.

An unusual feature is the automatic head demagnetizing. This circuit operates each time the Record key is released. This may record a click on the tape which can be eliminated by backing the reel a bit before making the next recording. This demagnetization protects the tapes against the accumulation of DC noise and preserves the signal to noise ratio.

The recorder can also be operated by remote control in either record or play position. This is done with the use of the furnished "Y" adapter cord with the switch cord attached in place of the regular adapter cord.

As mentioned previously, as part of our tests the recorder was set up in a supermarket. Here it was run for eight hours a day, Sundays excepted, and at the end of three weeks' test run no difficulties had been encountered at all.

All functions operated properly and easily. We did find that the keys had to be depressed all the way down to latch into position.

The unit is well and ruggedly constructed. It is attractive in appearance and the operation is straightforward and well within the capabilities of anyone to operate. The instruction manual is very clear and concise and contains plans for mounting the unit.

We have no hesitation in recommending that you consider this machine if you are planning a permanent home or store installation.







■ Complete mixing and fading of any two, three, or four channels! A FISHER exclusive! ■ Separate tapehead playback preamplificr-equalizer. A FISHER exclusive! ■ Seven inputs, including 2 Phono, Mio and Tape. ■ Full record equalization tacilities ■ Variable-crossover feedback-type Bass and Treble Tone Controls. ■ Two cathode-follower outputs. ■ Self-powered, with DC on all filaments: achieves a hum level that is inaudible under any conditions. ■ Inkerent hum: non-measurable! On Phono 72 db below output on 10mv input signal, on high-level channels: better than 85 db below 20 output. ■ IM and harmonic distortion: non-measurable! ■ Frequency response: uniform, 10 to 100.000 eveles ■ Chassis Size: 12¹/₄ × 1³/₄ × 4¹/₄^m high. Weight, 10 Ibs Chassis, \$99.50 • Mahog. or Blonde Cab., \$9.95



MIXER-FADER • 50-M Electronic mixing and fading of any 2 signal sources. No insertion loss, Extremely low hum and noise level. \$19.95 Write for Free Specifications FISHER RADIO CORP. 21-27 44th Drive, L.I.C. 1, N.Y.



Record your own dramatic productions at home ... Bring up the theme ... fade in the mood music for the opening scene. Turn on the rain ... bring up the thunder and lightning.

Crowd noises, animal sounds, train whistles ... all at your fingertips with "Major" Production aids. Your friends will enjoy your broadcasting party when they hear how



NEW PRODUCT REPORT



IRISH DOUBLE-PLAY TAPE

\dots 2400 feet on a 7" reel, $\frac{1}{2}$ mil Mylar base, Ferro-sheen process.

THE Irish Double-Play rape was the first "super-thin" rape to be announced. "Super-thin" is not a misnomer for the tape is 1/2 mil in thickness—that is one-half of one thousandth of an inch. When you consider that the average human hair will run three thousandths of an inch in thickness, you can realize how thin the tape is.

Standard tape is $1\frac{1}{2}$ thousandths and is usually on acetate base. The development of DuPont's Mylar polyester film was responsible for the development of the new thin tapes.

Mylar is impervious to moisture and possesses far more strength than acetate. Thus it is possible, for the first time, to produce such a thin tape and still have it within the realms of practicality.

The new tape must be handled with care. It cannot be subjected to sudden starts and stops which will put stress on it nor used in recorders which impose an excessive strain on the tape. Jerky winding or rewinding, or machines which spill tape due to faulty operation must be watched carefully if this tape is used.

We subjected it to ordinary use on standard recorders and had no difficulty with it. Only when we exceeded the bounds of common-sense handling of the tape did trouble occur.

When subjected to excessive stress the tape will stretch and become stringlike before it breaks. It may be spliced with the same facility as standard tapes should splicing be necessary.

Our greatest fear was "print through" which is the transfer of the magnetic pattern from one layer to the next.

To give print through its maximum opportunity, we recorded the sounds of bells which we picked because the heavy impact of the sound when the bell is struck leaves a heavily magnetized area on the tape.

We deliberately over-recorded it, the VU meter swinging far off the



Product: Irish Double-Play Recording Tape.

Price: 2400' on 7" reel \$7.50 net.

Manufacturer: ORRadio Industries, Opelika. Ala.

scale at every bong. The tape was wound tightly and stored under room conditions for three days. On playback, we found the print through to be negligible for practical purposes. A normal recording made on the tape gave good results.

Printing through can be minimized by keeping the recording level at the lowest practical point, by keeping the tape from cool to normal temperatures and by storing the tape in a wound condition, rewinding just before it is played back.

The coating on this Double-Play tape has been done by the Ferro-sheen process. The details on this were made public for the first time at the recent Annual meeting of the Audio Engineering Society by Mr. Herbert Orr. President of ORRadio Industries.

Ferro-sheen is not a coated tape in the regular sense but a hot melt lamination process. This means that the coating is pre-formed and, with its binders, is rolled on the base material under heat and pressure. The result is a mirror smooth finish which requires no further polishing. Inasmuch as the coating is pre-formed, the possibility of imperfections is reduced almost to zero.

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The company makes the claim that the coating will not rub off. Our tests indicated that the claim is valid.

We feel that this tape, with reasonable care is suitable for most recorders. Its very obvious advantage is the additional length of recording time on one reel. Recorders which are limited to 7 inch reels can now record as much material as units which accommodate $10\frac{1}{2}$ inch reels, using standard tape. At the $7\frac{1}{2}$ inch speed, two hours can be recorded on a dual track reel. At $3\frac{3}{4}$ inches per second, four hours recording time is possible.

TAPE CLUB NEWS



Voicespondence Club members enjoying gettogether in Washington, D. C.

Rainy weather failed to dampen the spirits of the 29 people who attended a recent meeting in Washington, D. C., of the district Voicespondence Club members.

Activities for the gathering were planned by the Charles Copes, District Deputies of the Penn-Jersey District and Bob Crouse, District Deputy of the Potomac District.

Interviews were conducted by Charles Owen, Club Secretary, and recorded by Voicespondent Paul Stillwell. Recorded greetings from all 10 District Deputies nor present and Chaitmen of the Blind Activities Committee and Spcial Fund Trustee followd the interviewing. A demonstration of pre-recorded tapes was made, and a questions-and-answers session was conducted.

Refreshments were served and general socializing rounded out the affair. An enjoyable time was had by all.

The Voicespondence Club has obtained a charter from the Virginia State Corporation Commission incorporating the Club as a non-profit organization under the provisions of Virginia laws. The charter represents many months of preparatory work on the part of the Club's management. Ir provides that the assets of the Club are to be under the control of three Trustees who will select a Secretary. Among the Secretary's duties will be management of the Club's affairs, editing of its publications, banking



all receipts, and preparation of the annual financial statement for the Trustees' apprival and submission to members.

Under the direction of World Tape Pal lames Buchanan, a recording on life in rural Australia was originated last November. It was made expressly for the World Tapes for Education program sponsored by WTP, and is currently being circulated among high schools in the U.S.

The recording features an introductory description of Brisbane Boys' College and its history, followed by interviews with several students from various sections of Australia, in which discussions on conditions of life in their particular locality are held. Songs and short recorded interludes typical of the country are interspersed among the talks. In all, an informative and interesting picture of life in rural Australia is visualized.

Any interested school or teacher-member of WTP may obtain a copy of the recording through the World Tapes for Education Tape Bank. Requests from schools outside the U.S. should include at least four international postal reply coupons with their request to defray postage expense. The postage rate in the U.S. is about 30c on a 7-inch reel.

Bill Patterson of Richmond, Indiana, is very grateful to World Tape Pal Daphne Halfhide of Paignton, South Devon, England, who recently located some triends of Bill's whom he had believed lost in the hurricane which battered the British coast in 1953.

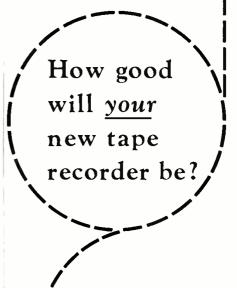
During World War II, Bill met an English couple and he continued to keep in contact with them after returning to America.

The letters between both parties ceased to reach their destination shortly after the hurricane and Bill feared his friends were among the victims. He mentioned this to Daphne who made inquiries and finally discovered that the couple had moved.

Since Bill had also changed his address, neither party was receiving any correspondence, but thanks to the efforts of Daphne Halfhide everything is fine once again.

JOIN A CLUB

TAPE RESPONDENTS INTERNATIONAL Fred Goetz, Secretary
P. O. Box 1404T, San Francisco, Cal.
THE VOICESPONDENCE CLUB Charles Owen, Secretary Noel, Virginia
WORLD TAPE PALS Harry Matthews, Secretary
P. O. Box 9211, Dallas, Texas
INTERNATIONAL TAPE WORMS Art Rubin, National Chairman
P. O. Box 215, Cedarhurst, L. I., N. Y.
GLOBAL RECORDING FRIENDS Alfred L, Sferra, D.D.S., Secretary
125 Hamilton Street, Bound Brook, N. J.



One of the answers lies in the quality of the magnetic recording head—a basic and important part of all recorders. The better the head, the better the performance you can expect. A Shure magnetic recording head insures a unit constructed to close tolerances . . . precision specifications . . . optimum performance of your recorder.

An outstanding example is the "Micro-Gap," a new, high quality magnetic recording head specifically designed for use in professional studio and fine quality home tape recorders. It provides excellent response over an extremely wide frequency range ... long operating life at maximum efficiency. For home recordings of professional stature, or for precision data recording equipment, the "Micro-Gap" cannot be excelled.

The "Micro-Gap" is the latest of the Shure family of fine-quality magnetic recording heads. When a tape recorder manufacturer announces a model equipped with any of them, you can be assured of the high quality of the tape recorder . . . for the choice of a Shure head is proof that the manufacturer is giving you the very best.





SHURE BROTHERS, Inc. 225 West Huron Street, Chicago 10, Illinois

SHOP OR SWAP

Advertising in this section is open to both annateur and commercial ads. TAPE RECORDING does not guarantee any offer advertised in this column and all swaps, etc., are strictly between individuals.

RATES: Commercial ads, \$.30 per word, individual ads, non-commercial, \$.05 a word.

Remittances in full should accompany copy. Ads will be inserted in next available issue. Ficase print or type your copy to avoid error. Address ad to: Shon or Swap, Tape Recording Makazine, Severia Park, Md.

DIFFERENT PRE-RECORDED tapes! Sample and catalog, 99c, Stone, Lunenburg 1, Mass,

DISCS FROM your tape, 81.00 up. Send stamped envelope for free list of services. Sales Recording Service, 3540 W. Jackson Blyd., Chicago 24, Ill.

AUTOMATIC SHUT-OFF, Details free, Build 10⁴₉^o reel adapter, Instructions \$1,00, LE ROI ENGINEERING, Box 251, Elmihurst, Illinois.

DO YOU HAVE TWO FRIENDS . .

... who are interested in recording and who would enjoy receiving a FREE sample copy of

TAPE RECORDING Magazine?

If you do, just send us the names on a postcard or use the coupon below.

TAPE RECORDING Severna Park, Md. Please send a copy of Tape Record- ing without charge to:
Name
Address
City Zone State
Name
Address
City Zone State
Your Name
Address
City Zone State

ATTENTION RECORDER owners—Have you a "home-type" recorder that doesn't fulfill expectations? If new, we will allow full value in trade on professional machines—Berlant Concertone, Crown, Presto, etc. Boynton Studio, 10 TR Pennsylvania Ave., Tuckahoe, N. Y.

TAPE RECORDERS, tapes and accessories, nationally advertised brands. Free catalog upon request. Satisfaction guaranteed. Dressner, Box 66A, Peter Stuyvesant Station, New York, N. Y.

PRECISION MAGNETIC HEADS, Erase-Record-Playback, Stancil-Hoffman Corporation, Hollywood 38, California.

NOW YOU can make \$100 weekly spare time with your tape recorder. Send 25c refundable. LP DISCS MADE FROM TAPES. 24 hour service guaranteed, 10 inch-30 minutes, \$1.25; 12 inch-45 minutes, \$5.75. Write for other speeds, Artistic Sound, 24110 Rensselaer, Oak Park, Michigan.

SYNCHRONIZER HOOKUP: Make sound movies with your tape recorder, \$10,00, Anderson, 2424 Phelps Street, Stockton, Calif.

FREE TO tape recorder owners—handy tape/disc timing chart, list of services, Sound Service Recording, East Meadow, New York,

SWAP: SX62A Halicrafters Communications Receiver and R-46A Matching Speaker. I need completely assembled Georgian 4way speaker system or something comparable, also need turntable, Am willing to pay cash difference if necessary. The SX62A and R-46A are like new (cost \$369.90). Let me know what you've got and we'll work out a trade, Leo Hammer, 133 Shamrock Road, Asheboro, N. C.

PROFESSIONAL SYSTEM of Stancil Hoffman R 4 tape recording and playback equipment. Strictly highest quality, in perfect condition, 15 and 7b₂ IPS, accommodates all reel sizes up to 14 inch. Synchronous drive, three motor transport, relay control, provides variable speed rewind for precise editing. Not recommended for home recordist, hut for commercial use it is tons. Hi F1 at 15 IPS. Available complete FOB Houston, Texas, \$500,00, Contact Technical Director, Radio Station KXYZ, Houston, Texas.

WANTED: Transcribed tenes of the following: Nat Brandwyne, Cugat, Chiquito, Clemente, Lud Gluskin and Clyde Lucas Orchestras, Also songs by Victoria Cordoba and Don Arres, 716 i.p.s. tane speed preferred, Write S, Kiamie, 930 Grant Avenue, Pelham 65, New York.

FOR SALE: Two Ekotabe recorders, broadcast models 105 and 101, very good condition, new heads—both for \$285.00, L. C. Smith, 3012 E. Central Avenue, Wichita, Kansas.

WILL SWAP 8 nm model 70 Revere magazine movie camera for good two-speed tape recorder, Also for sale or swap model 8K Presto disc recorder, Robert Webster, RD2, Wexford, Pa.

FOR SALE: Unused, in original cartons-Concertone TWR-2 recorder with TWDC carrying case, TWPAC power amplifierspeaker-carrying case worth \$595. Total will sell for \$495 plus shipping charges. M. J. Fein, 29 Wynmor Road, Scarsdale, N. Y.

MAKE A GOOD LIVING tabe recording. Write Bilina Studios, Ridgefield Park, New Jersey.

FOR SALE: Rek-O-Kut Challenger disc recorder, three-speed, with standard and microgroove leadscrews, hysteresis synchronous motor, GE RPX-050 variable-reluctance pickup, Excellent condition, \$350 FOB, V, R, Hein, 418 Gregory, Rockford, Illinois.

WISH TO tape respond with any and all persons interested in good music or who wish to talk about subjects on travel. An answer to your tape is personally guaranteed, Speed 3^3_4 or 7^{1}_2 . Address S, S, Jozan, 4417 No, Hazel Street, Chicago, Ill.

WAGNER 33-13 rpm Microgroove Disc Recorder, lathe-type feed screw, amplifier, speaker, portable case, \$85.00; Pickering 230-H Preamplifier, new tubes, \$20,00; 57 reel 900-ft, 1-mil Mylar tape, \$2.50; all excellent, priced F.O.B. Marilyn Phillips, 311 Penfleld, Rockford, Illinols.

FOR SALE: RARE RECORDINGS (1896-1927) Early Concert Bands & Brass & Reed Soloists, Recorded on tape or disc, Glenn D. Bridges, 2199 Lakevlew Ave., Detroit 15, Mich.

PRE-RECORDED TAPES at no extra cost, 5" reel \$3.50, 7" reel \$5.50. Specify speed and music desired. Concert-Dance-Dinner-Christmas, Order from Starlight Studio, P.O. Box 3229, Jefferson Station, Detroit 14, Michigan.

FOR SALE: Used Model 2010 Webcor tape recorder with mike and 2 7-inch reels tape, 2 input and 1 output cable, 2-channel input mixer, \$100, Also tape chest with 10 7-inch reels tape, \$20, For details write Kenneth Wooden, 1515 W, Monroe, Chicago 7, 111.

WANTED: Tapes of Jimmy Durante radio or telecasts prior July 1954; ditto Eddie Cantor prior November 1953; any Jolson broadcast, Clyde Miller, 2217 B, No. Booth St., Milwaukee, Wis.

BRAND NEW 1956 Model Hi-Fi VM-700 tape recorder, never used, Cost \$179.95, yours for \$138.00, Jack Fives, 4017 Fairfax Road, Baltimore 16, Maryland,

TIMPANI PROFESSIONAL RECORDING TAPE, Until now sold only to stations, Now released to all recordists. Better signal ratio and response or money back, Special trial: Four 1200 ft, reels, \$10.00. Bob Freund, 56-A Bennett Avenue, New York 33, N. Y.

FOR SALE: Magneeord PT6M auxiliary spooling mechanism, like new, \$85. Also eleven NAB reels for use with same, \$15. M. S. Scherer, Ring Trailer Court, 98th Air Refueling Sqdn., Lincoln AFB, Nebraska.

FOR SALE: Berlant latest model tape recorder, bought this September and used only 10 hours to record a special event, cost \$595,00, yours for \$399,00, Concertone 20/20, still in factory carton, \$325,00, Ampex 600, never used, \$495,00, Revere T10, two weeks old, cost \$235,00, yours for \$159,00, Philip Lance, Greenwich, N, J,

WANTED: Used or new tape recorder for business use. Will pay up to \$100. Frank Spayth, 2117 Lexington Ave., Springfield, Ohio.

WANTED: Portable Magnemite battery operated tape recorder. State price, condition and tape speed. Steve Sewzak, 206 Croton Ave., New Castle, Pa.

FOR SALE: Magnecord "Voyager" recorder, practically new, Shure-51 mike, never used, 80 Scotch tapes, 600 feet, good condition, Other miscellaneous items, Saerifice, Free delivery, west coast, H. A. Eaton, P.O. Box 232, Corning, Calif.

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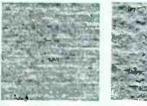
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WANTED: Used professional tape recorder and/or disc cutter, good condition only. Write Howard Rohrlick, 798 Tower Avenue, Hartford, Conn.



Won't ComeUn

These actual unretouched photomicrographs (50X) of FERRO-SHEEN and ordinary tape, taken under identical lighting conditions, emphasize surface irregularities of both tapes. See how irregular the eggshell surface of the ordinary tape appears in comparison with that of FERRO-SHEEN. See how much smaller are the shadows and highlights of the FERRO-SHEEN process tape, indicating a greater uniformity of oxide coating and a smoother surface.



FERRO-SHEEN PROCESS TAPE

CONVENTIONAL TAPE

FERRO SHEE

Shamrock 300

Make Your Own Test In Twenty Seconds!

Send for free Comparator Card. which has strips of all the lead-ing tapes mounted side by side for your own visual comparison. You will SEE the difference at a glance! The difference you will see is responsible for the im-provement you will HEAR the mirror-smooth surface of the FERRO-SHEEN tape results in vastly improved con-tact between recording head and tape and gives you optimum magnetic performance ... all the highs, all the lows.

FERRO-SHEEN IS NOW AVAILABLE IN THESE THREE QUALITY irish TAPES:

SHAMROCK #300: The ultimate in premium, pro-fessional tape for broadcast and studio use. 1.5 mil plastic base. Comes with 5' Mylar leader in dust-proof polyethylene bag. 1200 feet \$3.80 Hi-Fi net

LONG-PLAY #600: Extends playing time 50% over conventional tapes on same size reel. Same premium qualities as Shamrock #300, but on Dupont's 1 mil new miracle film Mylar. 1800 feet \$5.50 Hi-Fi net

OOUBLE-PLAY: Doubles your playing time with 2400 feet on standard 7" reel. For all applications requiring uninterrupted operations. Dupont Mylar base. 2400 feet (on standard 7" reel) \$7.50 Hi-Fi net. 2400 feet (on standard 7" reel).

If not available at your local dealer, write :



ALL RECORDING TAPE is coated with magnetic oxide. On ordinary tapes this coating rubs off in use and forms a harmful deposit of abrasive dust on the recording head. Unless the head is constantly cleaned, the collection of abrasive dust eventually wears it out. A further disadvantage of oxide-shedding, common to all ordinary tapes, is that after a few playings, the tape loses enough coating to alter its original frequency response characteristic.

WITH TAPE MADE BY THE EXCLUSIVE

FERRO-SHEEN PROCESS

The Oxide Will Not Rub Off!

The irish FERRO-SHEEN process of tape manufacture anchors the oxide coating to the base permanently, inseparably and much more smoothly. The obvious advantage of the homogeneous bond is that the entire vicious cycle of shedding and abrasion of recording head and tape is eliminated, resulting in longer life for the tape, longer life for the head and flat frequency response over a wider range.

ORRADIO INDUSTRIES, INC., Opelika, Alabama

World's Largest Exclusive Magnetic Tags Manufacturer EXPORT DIVISION: Morhan Exporting Corp., N.Y.C. IN CANADA: Atlas RADIO CORP., Ltd., Toronto, Ontario

ULTIMATELY,

EVERY PERSON WHO OWNS OR PLANS TO OWN A FINE HOME MUSIC SYSTEM MUST FACE THIS QUESTION:

"Shall I buy a Turntable or a Record Changer?"

The following statement represents the point of view of one of America's leading manufacturers of professional recording and playback equipment.

The choice between record changer and turntable is, for the most part, entirely personal to the user. It depends upon what he wants. If it is merely the physical comfort of hearing hours and hours of just music, without manual intervention, then the choice would be a record changer. On the other hand, if it is his desire to enjoy the utmost in sound quality, then a quality turntable is certainly indicated. In broadcast studios, for example, where reproduction quality is of prime importance, turntables are used exclusively.

The Record Changer

The record changer is an extremely clever device, and much ingenuity has gone into its complex mechanism. It originated in the days when 78 rpm was the only popular record speed, and the playing time of a 12-inch record was only about 4 minutes per side. A complete 40 minute musical composition required at least 10 sides or 5 records. The record changer made it possible for these records to be played automatically, without the need for getting up every three or four minutes to change records.

The Long Playing Record

The long-playing, microgroove record has changed all of this. Each side of a

12-inch long-playing record disc provides about 25 minutes of music. The same 40 minute composition now requires only two sides of a 33¼rpm 12-inch record. The long-playing record has also brought tremendous improvements in the quality of recorded sound. As a result, the older 78s are rapidly becoming obsolete among serious music lovers.

The High Quality Turntable

The turntable is basically a simple device. A manufacturer who desires to create a high quality instrument can devote all of his engineering skill to the one important function of the turntable: its rotating motion. A Rek-O-Kut turntable, for example, offers the closest approach to perfect motion; with virtually no rumble, wow, flutter, or other mechanical distortion.

There are other important advantages to the turntable. Once the angle between the stylus and record is established, it remains constant for all time. In the case of the record changer, this angle varies, depending upon the number of records stacked underneath the record 'in play'.

A turntable has a 'live' spindle, meaning that it rotates with the table and the record. The spindle of most changers remain stationary so that there is an element of wear introduced whereby the spindle hole of the record may become enlarged, and cause off-center wow. Similar wear can result as the record is dropped, and it slides down the long spindle. A third advantage peculiar to Rek-O-Kut is that the turntable itself is machined from aluminum castings. Aluminum is unaffected by magnetism, and therefore, the turntable exerts no 'pull' when used with a magnetic cartridge. With steel and other magnetic materials, the magnetic pull may actually cause the stylus to 'ride the groove' with a pressure considerably greater than recommended.

Conclusion

High fidelity is rapidly becoming a part of our home life. This is expressive of the typically American desire for the enjoyment of finer things. As specialists in the field of professional sound reproduction, and having served this field for years, we welcome the fact that this wonderful experience is now being adopted in the American home.

Rek-O-Kut precision turntables are among the finest in the world. Every detail of their construction is carefully engineered to provide the finest quality record reproduction. Whether you now own or plan to own a music system, we urge you seriously to consider one of the several Rek-O-Kut turntables. You will find that it makes all the difference in the world.

Literature on Request

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Export Division: MORHAN EXPORTING CORP. 458 Broadway, New York 13, N.Y. Cable: MORHANEX In Canada: ATLAS RADIO CORP., Ltd. 560 King Street, W., Toronto 2B.

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