

FREQUENCY APPLICATION

Basic Tools for Sound Energizing or Toning

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In an attempt to discover the most physiologically effective instruments and procedures for "Toning" and at the same time provide lowest cost, plus portability, many devices were tested and evaluated over several weeks of investigation. The systems described here work very well and may actually be superior to vastly more costly alternatives. Instructions are simplified so that even a child can produce excellent results. As an historical note, Sherry Edwards in her April 11-12, 1992 workshop at the L.A. "Brain Mind Symposium" used two Sony "Sub Woofer" speakers model SAW-55X (\$279 each) driven by a proprietary two-channel signal generator called a "SMAD", or "Self Management Auditory Device", a hand-held frequency counter for setting each of the two frequencies, plus the Korg. Waveforms were similar to the "Tsumani" waves of Dr. Tom Wing, ca. 1965. She demonstrated lower harmonics on the order of 40 Hz as "her tones."

Basic Basics: You'll Need the Following

1. A tone spectrum analyzer. The best device currently available is the KORG quartz Auto-chromatic Tuner, Model AT-12. It is found in better music stores for \$199 list and \$149 user net. Do not let clerks tout you onto any other brands or models such as the "Sabine" or "Boss." They won't work for this purpose without expensive modifications.

KORG U.S.A. (distributor): 89 Frost St., Westbury, N.Y. 11590. Phone (516) 333-9100 or (800) 872-5674. Customer Service will give you a list of dealers in your area. Check dealers in advance since only a few may actually have them in stock.
2. A Speaker-Amplifier for the "Toning" function. I tested many different devices from several manufacturers and selected the SONY model SRS-37 Speaker System. It takes 4-AA alkaline batteries, provides 1-1/2 Watts of clean audio, and is small. Retail cost is around \$70 for a PAIR (not sold separately) or \$60 at discount stores. The least expensive Sony SRS-20 (\$40/pair) also works well, is much smaller, but has no volume control. Since you'll generally need only one, you may wish to split costs and share

the second speaker with a friend.

3. An auxiliary MICROPHONE lets you utilize the Korg remotely from subject. Sony's \$11 model F-VS3 300Ω dynamic mike is excellent. Many other small low-impedance dynamic microphones will work equally well. The Korg contains a built-in microphone that performs adequately but is cumbersome when marking down data.
4. An accessory plug to adapt a 3.5 millimeter microphone plug to the larger (professional) 1/4 inch male to fit the Korg. (Radio Shack 274-367 \$1.79)
5. A roll of 1/2 inch wide paper masking tape, preferably white "film editor's" type or "drafting" tape which comes off easily without tearing paper.
6. Should you wish to explore the MAGNETIC field enhancement effects simultaneously with Acoustical Toning, add a Realistic Telephone Pickup (used as a transmitter). Radio Shack 44-553 \$2.89 and a dual mini phone jack "splitter" adapter #274-310 \$3.29 to your system. Its uses are covered in "Advanced" section.

Our preliminary tests assumed that sine waves were preferred. So an ELECTRODATA Audio Test set #ATS-1 with digital frequency display was

used as the signal source for energizing. (Electrodata, 23020 Miles Rd., Bedford Heights, Ohio 44128-5400 (216) 663-3333 or (800) 872-5674; Cost: \$695.) Any modern function generator such as the BK 3011-B providing sine, square, and triangular waves and containing a built-in frequency counter will work, but these are not battery-powered or nearly as portable and must be plugged into an a.c. outlet. Later tests concluded that sine waves are not as effective as square or other waveforms. Should you wish to experiment with TWO simultaneous tones, a Casio mini keyboard model SA7 "Sound Bank" is available at Circuit City for \$29.97. Sherry Edwards' only critique when reviewing these pages was that we should utilize two note tones more often. Of course any selected single or dual tones can be tape-recorded for the subject's later use. Items 1 through 4 will cost about \$200 complete, are quite portable, battery operated, will fit in a shaving kit, small camera bag or briefcase and together weigh only two lb. three oz. for the SRS-37 speaker option, or 1 lb. 9 oz. total utilizing the SRS-20 speaker, all including batteries. These three basic devices are everything you'll generally need for successful results.

Basic Diagnostic Routine for Sound Energizing or Toning

This is not F.D.A. approved, so no medical claims are to be made or implied. If labeled, say "For Experimental and Investigational Purposes Only."

Cut out and tape a blank chart to your Korg, carefully aligning corresponding notes with their proper columns. Top of paper goes just below "octave" display. Use paper masking tape, preferably 1/2" wide white "Film Editor's" or "Drafting" types which stick on and peel off easily. Slide Korg's power switch to "B-Check" (battery) and verify that meter pointer indicates within red zone and all Light Emitting Diodes flash as they step through their test functions. If batteries are low, replace. Then slide power switch one more notch to right to

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“Power On.” Now slide *second* switch to “Meter Fast.” Plug in your auxiliary microphone to top jack on left side of Korg labeled “input.” Use your adapter plug accessory if needed. If you have no microphone, direct subject to speak closely into the Korg’s built-in panel mike. Select a QUIET area away from background noises or conversations. Turn off radios, T.V.’s etc. since ALL ambient sounds may cause false readings.

With subject holding microphone (or Korg) about one inch from lips, have him/her talk in a normal to fairly loud voice. He may read in case he finds it difficult to maintain a continuous patter. Keep up a steady flow of words. (Ask him what he had for breakfast, etc.) With a pencil (preferred) or pen, make a short horizontal dash in every column underneath any notes that light. Don’t worry when you miss a few. Just keep on compiling data until you have at least three dashes in columns under *active* tones. Continue shifting your visual attention to adjacent notes as you proceed. Generally, there will be one or two (or more) notes that *never* light. THESE ARE THE MISSING TONES THAT MUST BE SUPPLIED TO SUBJECT DURING THE “ENERGIZING” PHASE. Watch for their absence carefully by concentrating on one or two notes at a time. It may take from 30 to 45 seconds to acquire sufficient data. Continue until MOST of the L.E.D.s have momentarily flashed at least twice. Missing notes may emerge over extended time. Be patient — take longer when necessary. Your skills will improve rapidly as you gain experience. Continue observing until you’re confident of accuracy. Don’t let subject see lights while you compile data as this “feedback” may motivate him to try to light up his missing tones. Finally, mark an “X” on chart corresponding to each OCTAVE indicator (green L.E.D.s) that lights.

When satisfied that *active* tones show several marks in their corresponding

columns, (three or so marks in a column are enough — you don’t need to catch any more marks in that row) — switch off Korg and check your data sheet for non-occurrences (no marks). “No-marks” are more important than marked (occurring) musical notes. Repeat test if uncertain. Most subjects will have from one to four (sometimes more) tones missing entirely. These are the ones which must be restored in Phase 2 or “energizing.”

Application of Sound Energizing to Subject

Your diagnostic procedure has established which tone(s) are missing and in which octave(s) this occurred. Now we’re ready to restore them. Slide the Korg’s right-hand switch to “Soft Sound” and hold “UP” or “DOWN” pressure switches (at upper right corner of Korg) until the chosen missing note is produced in it’s proper octave. If TWO octave lights flashed during diagnostics, set tone to LOWER octave (minus side). Holding down the press-switch will rapidly step through notes until you reach desired tone. If several *adjacent* tones are missing, re-energize only with the center note of the missing cluster. Now plug your speaker into “EAR” outlet on left side of Korg, turn speaker on by pressing circular front toggle switch. Red LED will indicate power “on.” Set volume to comfortable level. Subject can be standing or seated. If subject is seated, have him slide forward in chair so his entire spine is accessible.

First, hold speaker in firm contact with spine at base or lumbar region, dial output to fairly loud volume and apply sound and voice-coil’s radiated magnetic fields for about ten seconds. Then move speaker up his back about six inches and repeat the energization. About every ten seconds move speaker up another six inches. Continue until its even with shoulders at back of neck. Next do back of head, then top of head

(crown). Now place speaker against front of neck under chin at collarbone and apply tone. At this position, ask subject to *vocalize* or sing that exact tone, matching it as closely as possible. About half of subjects find this difficult. Be patient. Sometimes holding speaker behind right ear touching mastoid bone will provide “bone conduction” paths that make singing the correct tone easier.

Continue vocalization for an additional fifteen or twenty seconds AFTER he achieves precise note. This generally causes subject’s face to flush or blush, indicating peripheral vaso-dilation — almost like a niacin vitamin rush. Subject may feel light-headed. Blood pressure may drop. GSR and EAV measurements may change. Tones that *are* present during “diagnostics” appear much easier for subjects to duplicate with their voices suggesting a discontinuity somewhere in his physiological or psychological system which can be readily restored by this technique.

Now let his system adjust or stabilize for about three (or more) minutes before installing another missing note, if required. If the second (or third) missing tone is superimposed too rapidly, his system may become “scrambled” or confused. At this point, re-running diagnostic routine generally shows presence of previously missing notes.

Generally Asked Questions

Why place the speaker in contact with body? It is beneficial to have the acoustical energy actually vibrate tissue, bones and cavities. And most important but seldom realized, the loudspeaker’s voice coil radiates *magnetic* energy known as H-B vectors in the Maxwell equations. These invisible fields may be the source of highly beneficial physiological responses since they generate currents in conductive tissues by back EMF (“Eddy current”) induction. These are at the identical frequencies as the sounds. And since magnetic vectors drop off very rapidly with small distances (up to one over “r” to the fifth

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power as opposed to one over "r" to the 2nd power for sound), contact is essential for maximum coupling. By actual measurement with a tri-field Gaussmeter, magnetic energy reads over 200 milligauss at front surface of the Sony SRS-37, but it drops to under 3 milligauss only three inches away. Fields of 2 to 3 milligauss are known to be physically psychoactive. The speaker's 200 mG field is only about 1/3 as strong as our earth's ambient level in which we live and evolve.

Are there any known deleterious side effects? To date, two persons reported slight digestive upsets when Toning was done shortly after eating.

If subject feels "high", light-headed or disoriented, delay driving for 15 or 20 minutes. See "Advanced Concepts" for other methods of Toning.

Advanced Concepts in Toning

Note: Data contained here is tentative. As additional research is done, many improvements and techniques will undoubtedly be discovered and others discarded. So these tested and workable preliminaries are offered as starting points for your own explorations and should not be considered final.

Can "Toning" be done remotely? Absolutely. Telephone lines carry all essential frequencies for voice analysis. You can easily couple your Korg directly to the line with a simple transformer/capacitor device (circuit diagram on request). After "diagnostics" are done with the caller, missing tone(s) can be played back to him in real time while his telephone earpiece is held to spine points, head and throat as described under "energizing." Or a distant subject could tape-record a few minutes of his voice and mail it to you for analysis. Direct coupling from your tape player's "Earphone" jack into Korg's "Input" jack eliminates micro-

phone speaker distortions and local noise when analyzing. Set playback level low enough to prevent overload distortion. You can then flip over his cassette and record his missing tone(s) for home use. Keep in mind that "missing notes" may change periodically. He can apply his tape machine's speaker up and down his spine, and practice vocalizing the proper notes as described. This suggests another interesting application. "Call this 900 number for a quick energy lift" or perhaps your classified ad under "services."

Can I produce partial (in-between) frequencies on my Korg? Yes. The method for tuning in between full notes by small increments is described in Korg's instruction booklet under "Calibrating," page 34. To reset to standard 440 Hz "A," push "Calibrate" while holding "UP" and "DOWN" keys simultaneously. An easier and more professional approach would be to acquire an off-the-shelf tuneable function generator such as the BK-3011-B, \$220 (Action Electronics, 1300 E. Edinger, Santa Ana, CA 92705 (714) 547-5169).

Are there other ways to test for missing tones? Undoubtedly. Slowly sweep through spectrum from bottom to top while subject's EAV points (Electro Acupuncture according to Voll) or GSR (Galvanic Skin Response) or EEG (brainwaves) or blood pressure are monitored. Needed frequencies may cause readings to vary. Check Dr. Ludwig's "Metronom" flicker-fusion variations while sweeping. Although speculative, these and others are being tested. Blood pressure is reported to drop dramatically on proper application of "missing" tone. Use a "Marshall F-88 automatic finger blood pressure monitor model 165" for rapid diagnostics; \$125 at discount pharmacies; \$169 (catalog #MA880) at "Sharper Image" stores.

Simultaneous Acoustical and

Electromagnetic Stimulation. With the "splitter," plugged into "Ear" jack on Korg, plug speaker into one outlet and "Telephone Pick-up" into the other. Put inductor on top of head (vertex) while speaker is applied to spine locations thus generating an exactly synchronized EM signal in head corresponding to those at speaker sites. "If you can't raise the Kundilini to the Crown, resonate the Crown to the Kundilini". Try toning his entire biosphere with several coils concurrently positioned at sites such as the Hara, solar plexus, throat chakra, Kundilini, Crown, etc., or use two or more speakers at different sites simultaneously. You may wish to wind a giant 6 ft. diameter coil of about 100 turns of #26 magnet wire around nails driven into a garage door and spaced for desired diameter loop. Paper-tape the wire strands together as a bundle. Attach loop underneath treatment table and activate with desired frequencies while doing body work for the whole-body magnetic toning.

What might we be doing here? With new-agers, mention "Chakra Energization." With traditionalists, explain that Dr. William Tiller in the 1960's established that "Chakra" locations corresponded closely with organs of the body's endocrine system. Applying acoustical and magnetic fields may replace missing subtle energy elements, re-set biological clocks and help bridge gaps or discontinuities between the organism's internal feedback loops and the "Divine Architect." Regardless of rationale, IT WORKS!

Other diagnostic and frequency-restoring methods are under current investigation such as applying sub-harmonics of the missing tones in the VLF brainwave frequency spectra, plus simultaneous two-note stimulation, plus determining how often *different* frequencies are needed to treat the same subject as he evolves on a daily basis. Computer programs and many polyphonic keyboard instruments can work, but are more cumbersome and expensive and must be "plugged in". New developments will be reported.