

**HOW TO  
HOOK UP AND  
ENJOY YOUR  
TEN PLUS™**

**AudioControl™**



Congratulations on having the good taste to buy the world's finest octave equalizer.

Now you can improve the performance of your speakers, adjust the sound of records, make killer car tapes and even improve the tinny sound of video soundtracks.

All that and lots of lights to boot!

## **MAKING FRIENDS WITH YOUR NEW TEN PLUS.**

The TEN PLUS is a fairly complex, high performance add-on with lots of buttons, knobs and sockets including some not found on any other equalizer, so face the blackboard and we'll run you through each control, hole and protuberance on the TEN PLUS.

### **1. POWER SWITCH.**

Self explanatory. It allows the TEN PLUS to nourish its circuits from the vast dynamos and generators of your local monopolistic power company. Don't worry about using a splitter socket if you're short of outlets: The TEN PLUS draws less current than an electric clock and will pose no overload hazards when added to your current tangle of plugs.

### **2. EQ SWITCH.**

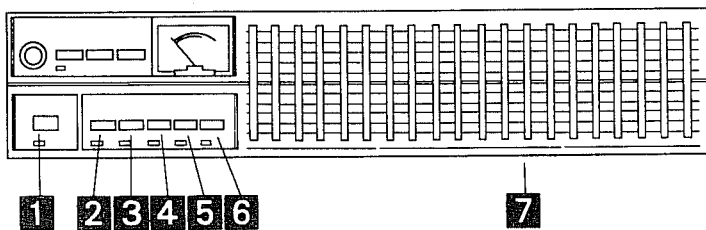
Think of this as a comparison switch. IN, you're hearing the effect of the TEN PLUS. Out, you're hearing things as they were before the TEN PLUS was installed. When you use the TEN PLUS to change the tone of a record or beef up speaker range, just pop the EQ switch in and out to make frequency comparisons. The only time we'd suggest leaving this switch out is on certain digital material where the dynamic range and frequency response can overtax some speakers.

### **3. PROGRAM/TAPE.**

This switch determines whether you're equalizing your program source (record, FM etc.) onto tape or not. In the OUT position, your program source is simply being equalized and played through your speakers. The IN setting transfers all the equalization to your tape deck. Just about all cassette and open reel recordings can benefit by equalization which we'll cover farther on. Note that the LED under the PROGRAM/TAPE button blinks on the IN position to warn you in case you DON'T want to EQ a tape.

### **4. SUBSONIC FILTER.**

Subsonics are inaudible ultra-low frequency oscillations caused by turntable/speaker feedback, floor vibration, record warps and other nefarious enemies of your speakers. They manifest themselves in a visible flopping of speaker woofer cones. Distorting and destructive, subsonics are chopped off below 20Hz by this special filter circuit. Don't confuse it with the lousy "Low Cut" filter on your receiver or integrated which also robs audi-



ble low bass. The SUBSONIC filter on the TEN PLUS should be left IN at all times with no audible loss of bass and a whole lot of positive speaker protection.

### 5. VIDEO/AUXILLARY.

Both this button and the TAPE MON button next door allow you to play different inputs into the equalizer and then into your receiver or preamp for listening. When you press VIDEO/AUX IN, the TEN PLUS will be equalizing input from a television, disc player, VCR or any other line level source. We've included instructions on how to plug into the earphone jack on TV's without audio outputs.

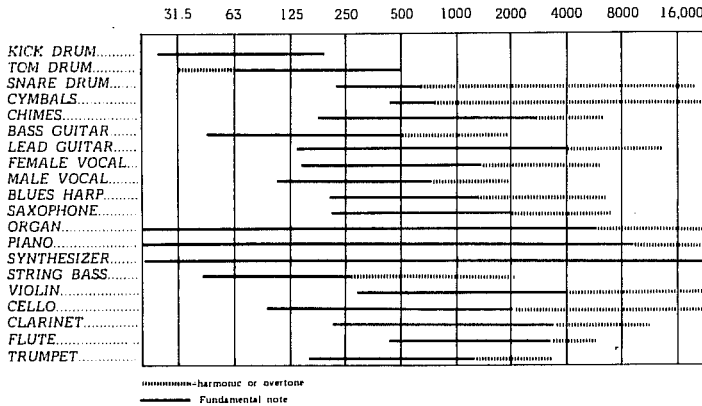
### 6. TAPE MONITOR.

This is a "loop" just like the one controlled by the Tape Monitor on your receiver. When pushed in, the TEN PLUS is receiving signals from the tape decks. Note that if the deck is not playing and the TAPE MON button is pushed in, deafening silence will occur. Our service department gets a lot of "broken" TEN PLUS's because the customer mistakenly pushed the TAPE MON.

Since the TAPE MON is a loop which goes out of the TEN PLUS through a tape deck or other device and back in, it is where you'd plug any other sound enhancing devices such as ambience generators, noise reducers, expanders, etc. If such a device is installed, pushing the TAPE MON button IN will activate this device. See the hook-up details if this is getting hazy. If you don't own any other outboard add-ons, don't worry about it further.

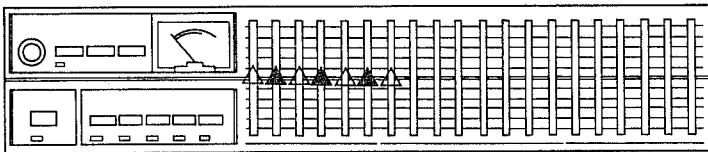
Next we come to the ten sliders that make up the equalization portion of the TEN PLUS. The sound spectrum — from lowest to highest — is divided up into ten EQUAL ranges, called octaves. Don't worry about the fact that the frequency numbers don't jump up in orderly tenths but instead approximately double. Just think of them as ten equal bands of sound. Each has its purposes and contributes different experiences to your enjoyment of music. While reading this section, note the chart of instruments which will help you understand the relationships of instruments to frequency bands.

## Chart of Instruments & Equalizer Bands.



### 31.5 Hz, 63 Hz, 125 Hz, 250Hz: THE SLIDERS THAT SHOOK THE WORLD!

The four bottom sliders on your TEN PLUS roughly correspond to the bass control on your amp or receiver — or rather we should say that your receiver's bass tone control is what's rough.



31.5 Hz. Truly a piece of the rock. This lowest of lows is what you've always wanted more of. It's the frequency that you *feel* as well as hear. The frequency that kicks you at live concerts.

Unfortunately, the whole signal chain conspires to remove it. Even \$1000 microphones aren't flat that low; studio recorders roll off in this area. It's hard to master onto vinyl. Tough to pick up with most styli, and pretty near impossible for most speaker woofers to reproduce.

So, even if you run the 31.5Hz slider up to +15Hz, your speakers will probably be 5dB or more down at this gutrocking frequency.

Lay it on thick, if you have the amp power to handle it.

63Hz. Here's the bass you were after when you used to turn on the loudness or bass tone control. It's the deep, tight, strong bass that makes rock solid and disco kick. It's also where most speaker systems start giving out, as you'll see when you response-analyze your speakers and room. But, if it doesn't take a lot to flatten the response of your system, feel free to add some more.

Most studio producers and engineers actually *cut down* on this frequency to compensate for teeny, tiny AM radios and bubblegummers' cheap compact stereos, so adding some 63Hz is not "gonna be no sin," as B.B. King put it.

It's the slider that makes the bass drums and floor toms "bigger" and broadens bass guitar parts. And, even does surprising things to operatic basso voices. (Forget it on Neil Young's, though.)

125Hz. This is the bass that juke boxes and cheap stereos specialize in. It has a boom quality that can get very tiresome to the ears after a while.

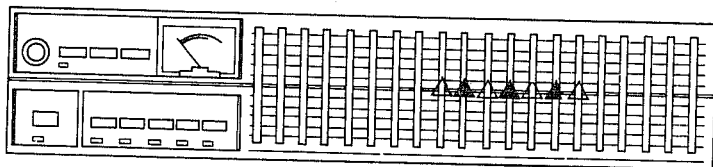
That's not to knock it. Push the 125Hz slider to MINUS 5dB and you'll find a lot of what you might have *thought* was bass will be gone.

You see, if 31.5Hz and 63Hz are the flour and eggs of a cake, the 125Hz band is the vanilla extract and sugar — the flavoring of bass. Boosting it too high is like guzzling straight extract and sugar syrup. Use 125Hz sparingly, as a seasoning, the way producers do.

Maybe +3 to pump up a vocal or a bass guitar part. A bit more if you're a drum freak. Also good for acoustic bass, virtually all symphonic music and your Aunt Tillie's goiter.

250hz. This is on the upper fringes of bass. Fiddle with it and you'll see it has relatively little to do with bass guitar or kick drum. It does have a lot to do with voices and lead guitar solos, though. Without it they lack body. Add 250Hz to "flesh out" thin vocals or older records with narrower dynamic ranges.

## **BRINGING THEM FORWARD AND MOVING THEM BACK: 500, 1000,2000,4000.**



These sliders control the core of music. Melody instruments, vocals, midrange percussion — almost everything we associate with music. With care, you can substantially change the sound of most melody instruments as well as vocals. Each cut and album will be different, so experiment.

In our experience the 1000 slider does most for all-around human voice presence. 500 is great for male voices and jazz tenor saxes. Some solo piano benefits by a little boost here, too.

In practice, folks seem to cut down the 2000 and 4000 as much as they boost them. There seems to be plenty of these frequencies in most contemporary pop cuts. The question is, is there too much? Particularly at high sound pressure levels. Try it for yourself.

10. Analyzer UP and Analyzer DOWN Buttons. These control which frequencies the warble tone is produced at and which sliders are lit correspondingly.

11. OdB Light. To make it even easier to determine when the meter has reached exactly OdB, we have electronically coupled it to a light emitting diode which comes on at that level.

12. Meter. This is the heart of the TEN PLUS analyzer system. While it looks quite a bit like a VU meter on a cassette deck, it's a different animal entirely. Most meters are designed to be instantly reactive. The dB meter on the TEN PLUS is meant to be sluggish. It reacts to the decibel level of the microphone, speakers and room and visually reports to you whether there's too much or not enough of a certain frequency.

13. Warble tone. Deep inside the semiconducting recesses of the TEN PLUS lives the warble generator. In the Analyzer section, we've included an explanation of this audio test medium.

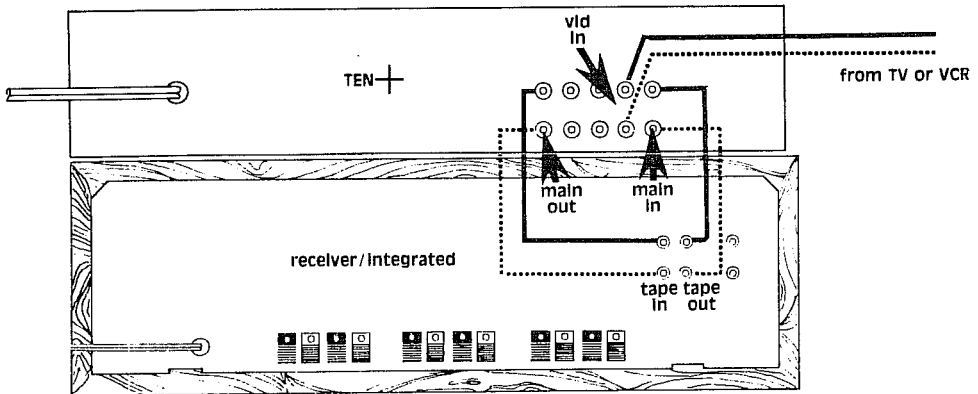
## HOOKING UP THE TEN PLUS AND A RECEIVER.

1. Locate the four sockets marked TAPE on the back of your receiver, pre-amp or integrated amplifier. Two will be marked IN or PLAY, and two will be marked OUT or RECORD.

2. Run a set of connection cords from the receiver's TAPE OUT to the TEN PLUS' MAIN IN.

3. Run a set of cords from the receiver TAPE IN to the TEN PLUS' MAIN OUT sockets. Got that? IN to OUT and OUT to IN.

4. Optionally, if you have a VCR, disc player or TV with audio out, connect the video device to the TEN PLUS' VIDEO AUX sockets. If your TV only has an earphone jack, use an adaptor, available at Radio Shack or other electro-trivia shops.



## HOOKING UP THE TEN PLUS WITH A TAPE DECK AND RECEIVER

1. Locate the four sockets marked TAPE on the back of your receiver, pre-amp or integrated amplifier. Two will be marked IN or PLAY and two will say OUT or RECORD.

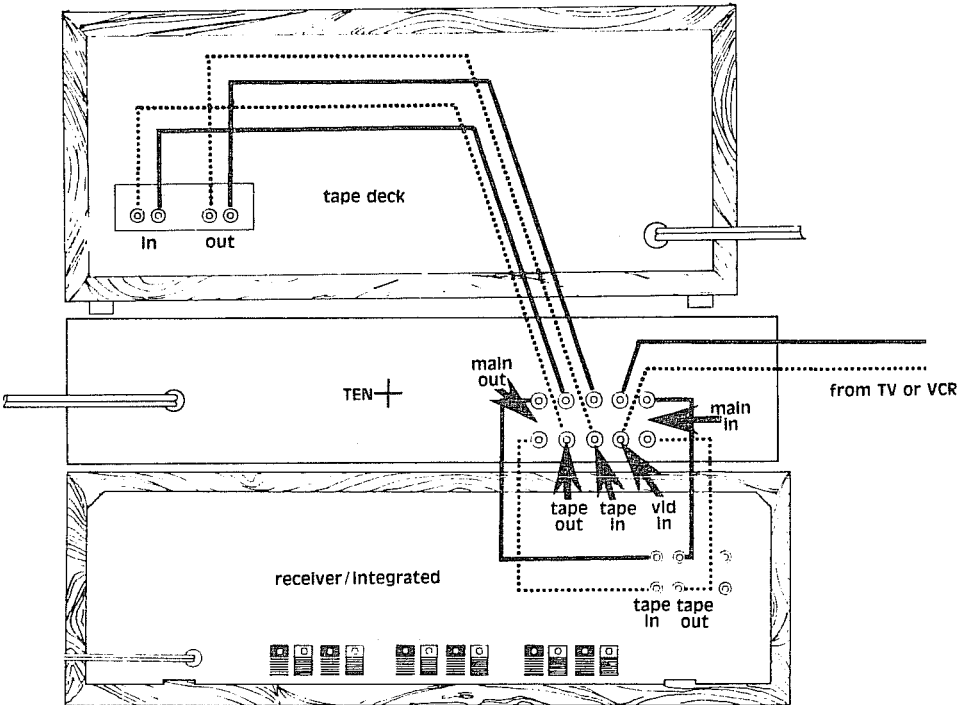
2. Run a set of connection cords from the receiver's TAPE OUT to the TEN PLUS' MAIN IN.

3. Run a set of cords from the receiver TAPE IN to the TEN PLUS' MAIN OUT sockets. Got that? IN to OUT and OUT to IN.

4. Optionally, if you have a VCR, disc player or TV with audio out, connect the video device to the TEN PLUS' VIDEO AUX sockets. If your TV only has an earphone jack, use an adapter as shown, available at Radio Shack or other electro-trivia shops.

5. Run a set of patchcords from the TEN PLUS' TAPE OUT to the tape deck's IN sockets.

6. Now run a set of cords from the TEN PLUS' TAPE IN to the tape deck's TAPE OUT. Again, it's IN to OUT and OUT to IN. And Left to Left, Right to Right.



## HOOKING UP A "BLACK BOX", CASSETTE DECK AND THE TEN PLUS

"Black boxes" include other equalizers, expanders, Bose Active equalizers, noise reduction units, etc. Also called outboard signal processing devices.

1. Locate the four sockets marked TAPE on the back of your receiver, pre-amp or integrated amplifier. Two will be marked IN or PLAY, and two will be marked OUT or RECORD.

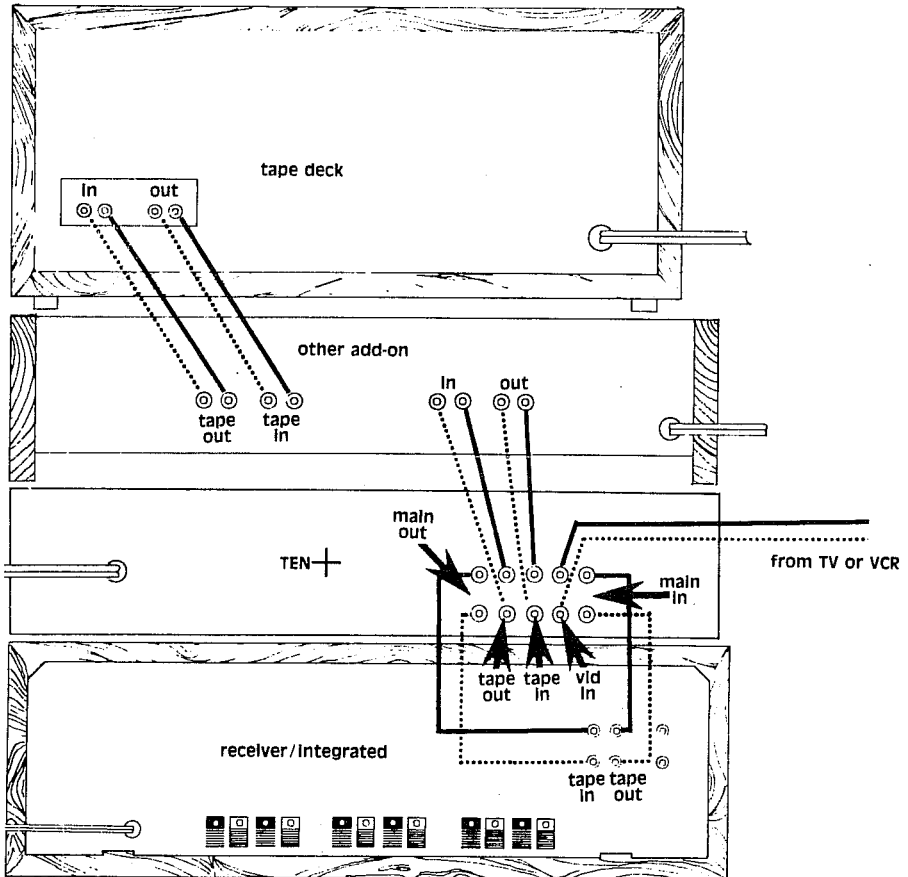
2. Run a set of connection cords from the receiver's TAPE OUT to the TEN PLUS' MAIN IN.

3. Run a set of cords from the receiver TAPE IN to the TEN PLUS' MAIN OUT sockets. Got that? IN to OUT and OUT to IN.

4. Optionally, if you have a VCR, disc player or TV with audio out, connect the video device to the TEN PLUS' VIDEO AUX sockets. If your TV only has an earphone jack, use an adapter as shown, available at Radio Shack or other electro-trivia shops.

5. Run a set of patchcords from the TEN PLUS' TAPE OUT to the additional unit's IN sockets.

6. Run a set of patch cords from the TEN PLUS' TAPE IN to the black box's OUT sockets.





7. Now locate another set of sockets on the black box (titled TAPE OUT and TAPE IN. Run a set of patchcords from the black box's TAPE OUT sockets to your cassette deck's IN sockets.

8. Now run a set of patchcords from the black box's TAPE IN sockets to your cassette deck's OUT sockets.

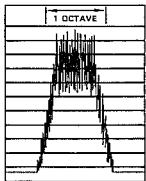
9. Enjoy.

With this set-up, input from your tape deck is controlled by the "black box's" tape monitor circuit. Leave the TEN PLUS' TAPE MONITOR and the receiver's TAPE MONITOR circuit IN at all times if you want both the TEN PLUS and the additional add-on to be operating at all times.

FM and phono impulses go from the receiver to the TEN PLUS, out of the TEN PLUS into the black box, out of the black box into the cassette deck for recording if you wish, back into the black box from the tape deck, out of the black box into the TEN PLUS and finally from the TEN PLUS into the receiver again. So you can hear the whole mess. It's like links of a chain: If you have more than one add-on, they simply go between the TEN PLUS and the tape deck. Remember that not turning one of the "links" on, or not pushing its tape monitor button, will break the chain.

Note: If your receiver doesn't have a tape monitor loop system (Yamaha comes to mind), call us at (206) 775-8461 Pacific time and we'll explain how to handle things.

## USING THE ANALYZER SECTION OF THE TEN PLUS.



warble warble warble warble warble warble warble warble

### WUTS WARBLE?

What is this strange video arcade sound and how can it be used to adjust room and speaker? Basically, a warble tone is a rapidly oscillating tone of fixed amplitude with specific frequency parameters.

Well, actually that didn't sound too basic. In English, that means it's a tone that oscillates back and forth within a certain range, (in this case, one octave). It's like a little "window" of sound output. (see illustration)

If everything goes well — no room or acoustic distortion and perfect speakers — then our ultra-flat microphone will "see" this window exactly. But if anything isn't right with the room and speakers within that octave, the "window" is distorted, the meter will droop and you'll know to compensate in that area.

One question we're asked is how does the warble tone differ from pink noise. Well, pink noise is an entirely different test medium to fit a totally different kind of metering device: LED's. It's equal parts of each octave. In a unit like our C-101 you project pink noise from 32-16,000Hz and then look at the whole spectrum through the C-101's all frequency "window."

The TEN PLUS uses a dB meter which only "looks" at one octave at a time. So we provide a test medium which evaluates one octave at a time.

Is it accurate?

Very. Killer scientific instrument microphone manufacturers such as B&K use warble tones to calibrate their incredibly accurate lab mikes. And our tone is very much like theirs.

In either case, though, the basic concept is still this: Put a "perfect" signal in one side; read the "imperfect" output on a perfectly flat mike, and you'll know what imperfections are being contributed by the room acoustics and speakers.

And so on to some analysis even Woody Allen would like.

### GETTING YOUR HOUSE IN ORDER.

Before you fiddle around with equalization, you should do everything you can to improve speaker positioning and L-pad balance.

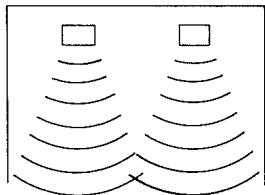
First let's consider speaker positioning. This breaks down into two concerns, 1) highend propagation and 2) bass propagation.

No tweeter is as good a radiator of highs as it could be. They all tend to be somewhat directional. That is, you hear more highs directly in front than you do as you move around to the side of the speaker.

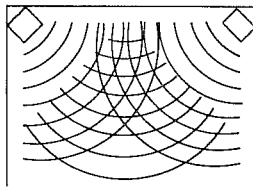
Thus, you want to make sure that your speakers' tweeters are pointing directly at your listening position.

If they're on the floor, this may mean tilting them up slightly toward your listening position. If you have them up on bookshelves, make sure the tweeter is lowest and that the whole speaker isn't much higher than chest high. All this ensures that what highs your speakers do put out can get to your ears in a straight line.

Speaker placement also dramatically affects bass. Put simply, bass is increased when you stick a speaker in a corner or close to the floor.



At least three feet away from corners cuts bass addition.

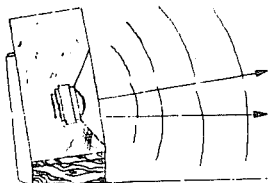


Corners act as horns to increase bass.

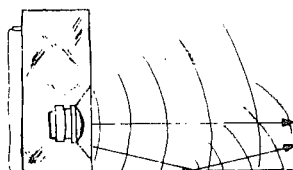
Sometimes this is good and sometimes it's bad. The type of speaker you own, how big its woofer is and what kind of music you play all have effects. Experiment around between placing speakers in corners and moving them out into the room.

If you like rock and pop music we recommend corner placement to boost bass (since you have an equalizer/analyzer you can cut down on the frequencies which get too exaggerated).

Whether or not to place speakers directly on the floor is also a consideration.



Lesso basso reduce-o



Mondo basso profundo

Some speakers tend to bounce midbass off the floor and out at the listener, causing sort of a doubling effect. This resonance may not be desirable.

Whether you should invest in a speaker stand which elevates the whole shebang and eliminates floor resonances can be determined with some beer or pop cans. Elevate each speaker with four of 'em and then play some music with lots of bass. If "bonkiness" is cut down without losing really low bass, stands will be a help.

Again, we philosophically tend toward increasing bass naturally with floor/corner placement as much as possible since it can always be reduced with the TEN PLUS. Much more efficient than boosting bass electronically.

### WHAT THE "L"?

Two and three-way speaker systems have switches or knobs (L-pads) on them to control output of the tweeter and midrange in relation to the woofer which gets to go full blast all the time.

We could tell you to "consult your speaker's owner manual" for info on this but that's a cop out because either they didn't tell you much to start with, or the instructions got buried in your closet somewhere.

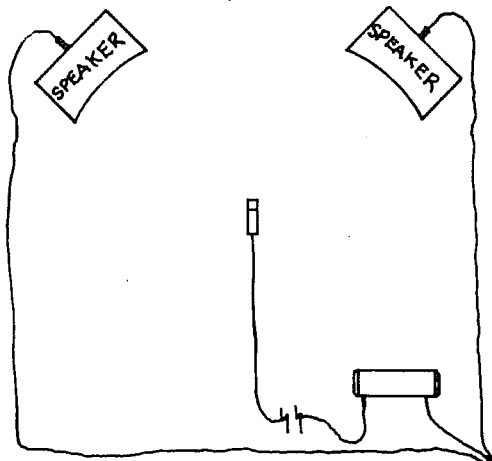
Theoretically the Lpad controls were intended to help integrate the speaker with the room, but you have the TEN PLUS for that. So what we suggest is you just try to get the speaker elements to "blend." That may not mean a neutral setting for the Lpad controls, though.

Tune your FM receiver between stations to get a hissing sound. Now turn *down* your receiver treble control all the way and turn *up* the bass all the way. While this is only a crude approximation of pink noise, it *is* a constant sound with which to adjust your speakers.

Place your ear between the tweeter and midrange on one speaker. Adjust the tweeter control until the rushing sound seems to "blend" between midrange and woofer.

If you have two-way speakers there'll only be one adjustment to "blend" tweeter and woofer.

Now you have your speakers and room ready for warble tone analysis.



## FOREPLAY.

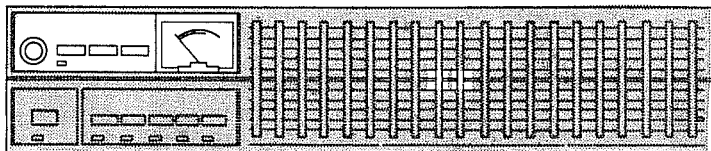
1. Make sure the TEN PLUS and your amp or receiver are turned on.
2. Set the TEN PLUS sliders at ODB and make sure that your receiver's treble, bass, loudness, low cut, high cut and icemaker knobs are either out or set at zero.
3. Place the Audio Control Measurement microphone in your listening area with its element pointing between the speakers. If you listen sitting down, make sure the element is at the same height as your ears. You might tape it to a chair back, for instance.
4. Push the Analyzer button on the TEN PLUS. You'll notice three things. a) a strange burbling noise is coming out your speakers, b) the Calibrate light is on just below the Analyzer button, c) all the LED's on the sliders went out except the two marked 1K. That's because you're listening to 1K warble tone which is used to calibrate the system.
5. Adjust the VOLUME CONTROL of your amp or receiver until the needle on the TEN PLUS meter just reaches OdB. The red LED in the meter face should just come on and possibly flicker somewhat.

Now you have set the system up so that warble tones at other frequencies will be the right sound level. The procedure for analyzing the room is very simple.

## DOING THE DEED.

With the microphone in the same place, the volume level of your receiver set from the previous steps, you're ready to find out just what your room and speakers have been doing all these years.

1. Touch the UP button on the TEN PLUS analyzer section. The warble will sound higher pitched and only the 2K sliders will be lit.



2. Adjust the 2K sliders up or down until the TEN PLUS meter hovers on zero and the LED just comes on.
3. Now hit UP again to move the warble tone to 4K. You'll see the 4K equalizer sliders light up.
4. Adjust the 4K sliders until the meter LED lights up as per step 2.
5. Repeat for 8K and 16K.
6. Now touch the DOWN button to retreat through 8K, 4K, 2K, 1K until you reach 500 Hz. Adjust left and right 500 Hz sliders until the meter and light indicate OdB.
7. Do the same for 250Hz, 125Hz and 60Hz. Don't be surprised if it takes some big boosts or cuts in these areas since these frequencies are often real speaker trouble spots.
8. 31.5Hz is your last warble band. Immediately after pressing the DOWN button to light the 31.5Hz sliders and activate this ultra-low warble tone, listen to your speaker woofers to

make sure they're not overdriving or making clacking noises. Some woofers simply weren't designed to go this low.

□ 9. If everything sounds kosher, adjust the 31.5 sliders up to achieve as much bass as possible. It is doubtful you will be able to actually make the TEN PLUS meter hit zero since most speakers simply can't put out as much 31.5Hz bass as upper frequencies. So don't be bashful about pushing the sliders all the way up. Again, listen carefully to make sure the woofer isn't complaining.

□ 10. Now RE-ANALYZE each frequency between 31.5 and 16K. You'll note slight changes which are caused by the adjustments you made to adjacent frequencies.

□ 11. When you get to 16K, move down again through each band to 31.5 to smooth any final trouble spots. Touching the UP or DOWN buttons repeatedly should produce fairly smooth meter reactions of no more than 1-3dB.

### **WHAT HAVE I DONE?**

Sit back and look at the curve made by the TEN PLUS sliders.

The amount that the curve deviates from 0dB is how far from "flat" your room and speakers were making the sound.

We've included a blank chart in the back which you can use to draw the curve if you'd like to compare it to others. Just plot the values backwards. That is, plot +4dB as -4dB, etc. What you now have is a plot of your speakers in your room. Doesn't look much like the one in the owner's manual, literature or magazine review does it?

Also, compare the final setting with our suggestions on how to adjust various types of speakers were making the sound.

### **REPEAT WHEN NECESSARY.**

When's necessary?

Re-analyze whenever you 1) move your speakers, 2) re-adjust your L-pad controls 3) get new speakers 4) drastically change your room acoustics.

That would include adding a bunch of carpeting, drapes, lots more upholstered furniture; or removing carpeting, adding chrome and glass, etc.

One drastic EQ change is when you fill a room full of people. If you could ever get a whole room full of partying people to stand around while you warbled at them, you'd find a BIG change. Bodies drink up mids and highs quickly.

A room full of full-grown wombats is particularly nasty in this respect. Compensate by never inviting more than three marshmallows to any one party.

### **MIXING SETTINGS.**

The question arises, how can you do all the nifty fiddling outlined elsewhere in this manual if you have arrived at fixed settings using the analyzer.

The answer is to simply add (or subtract) the appropriate room/speaker EQ values from the various EQ's we suggest in the sample settings section of this manual.

Remember, you do NOT have to add the room/system EQ values when recording a cassette tape, so that cuts out some complications right there.

Use the graph provided to make up composite settings, for example, "room/system EQ + loudness curve" or "room/system EQ + killer—heavy—metal—sounds—best" etc.

### HITTING THE ROAD.

Cars REALLY need equalization. What with all those surfaces in a small volume with funky little 6" speakers you'd be appalled at the result.

It isn't that wacko an idea to haul your TEN PLUS (or at least one end of the mike) out and warble analyze your car.

Make sure the door is closed, though.

Instead of hooking the warble generator into the cassette deck, just make a warble cassette on your indoor cassette recorder and haul it out to the car.

After recording the analyzer settings, make a new tape incorporating compensations to verify the settings.

### MORE HELP.

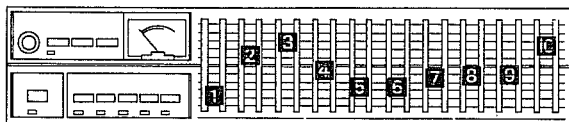
We're up here in our rainforest factory to help you.

If something doesn't work right or you want more information, just give our Customer Service department a call. Sorry, *no collect calls*, though.

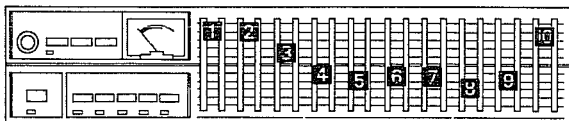
Happy warbling and may you have many musical experiences with your TEN PLUS and thoroughly enjoy the remarkable world of equalization.

### STARTING POINTS.

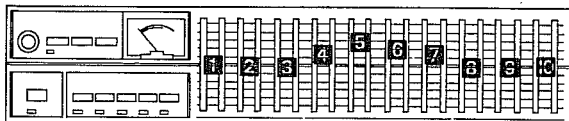
The following diagrams are starting points for adjusting your TEN PLUS, based on years of experience helping customers make hi-fi's sound better. Treat each as a starting point, using the EQ button to compare "before and after."



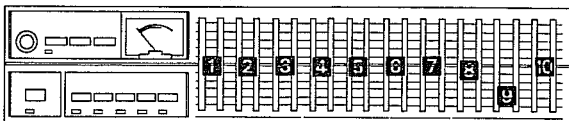
Making killer car-fi cassette tapes.



Improving television and VCR sound.



Accentuating indistinct vocals.



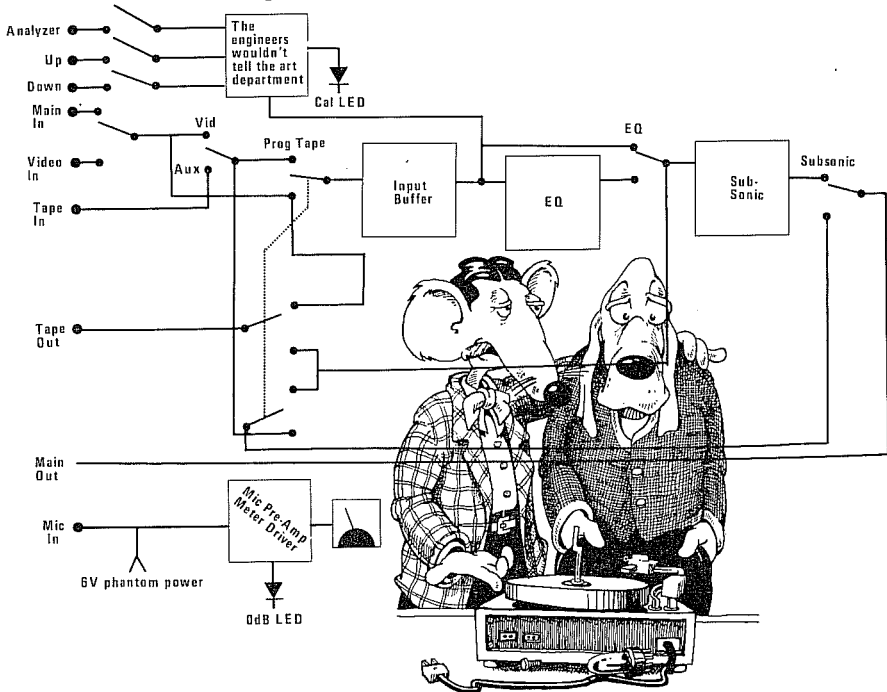
Cutting hiss from FM and noisy tapes.

## Specifications.

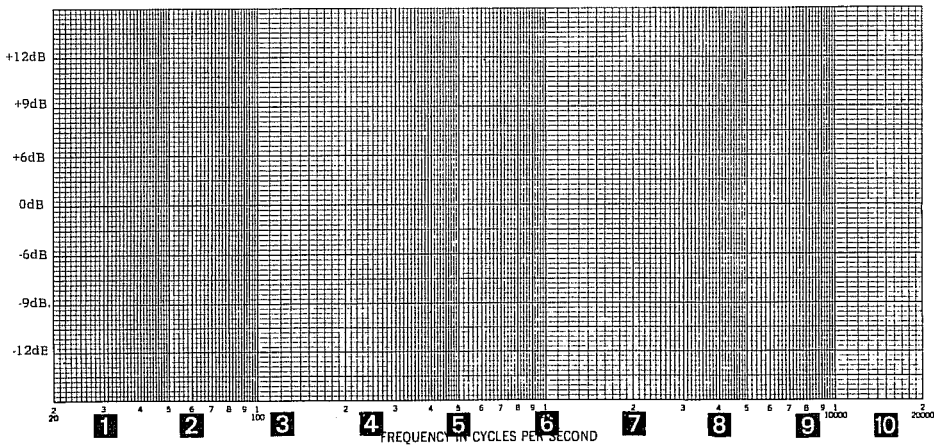
Distortion: .005% THD.  
 Signal-to-noise: 120dB.  
 Bandwidth: 3-100,000Hz  $\pm$  1dB.  
 Subsonic Filter: 18dB/octave from  
 20Hz Tchebychev configuration.  
 Input impedance: 100,000 ohms (to  
 fit any current electronics).

Output impedance: 150 ohms.  
 Country of origin: U.S.A.  
 Warble bandwidth: One octave.  
 Frequency accuracy:  $\pm$  5%.  
 Warble output level: 150mv.  
 Microphone:  $\pm$  1.5dB 20-20K.

## Flowchart of Operation.



To plot your room and speakers' response, photo copy this chart and plot each of the ten sliders at the points indicated. Reverse the values so that minus four dB on the TEN PLUS is represented as plus four on the chart, etc. When you get through, connect the dots with gently curving strokes and you have the awful truth.



## Audio Control Ten Plus 5-year Conditional Warranty

People are scared of warranties. Lots of fine print. Lots of non-cooperation. Months of waiting around.

Well, don't be scared of this warranty. It's designed to make you rave about us to your friends. It's a warranty that looks out for you and helps you resist the temptation to have your friend "who's good with electronics" try to repair your Audio Control TEN PLUS.

Also, warranties help us keep track of our customers so we can let you know of any modifications, dangers or improvement. The old factory recall thing. Now, that doesn't mean you are going to get put on a mailing list, and get weird Aztec porno or free deodorant samples. Your name and address on the warranty are strictly confidential to Audio Control.

So, go ahead and read through your warranty, then enjoy your equalizer for a few days before sending in the warranty and any comments.

"Conditional" doesn't mean anything ominous.

The Federal Trade Commission tells all manufacturers to use the term to indicate certain conditions you have to meet before they'll honor the warranty.

If you honor these conditions, we will warrant all materials and workmanship on your TEN PLUS for **Five Years** from the date you bought it, and will fix or replace it during that time.

Here are the conditions that make this warranty conditional:

1. You have to fill out the warranty card and send it to us within 15 days after you have purchased your TEN PLUS.

2. You must keep your sales slip or receipt so you have proof of when, and from whom, you bought your equalizer. We're not the only company to require this, so it is a good habit to get into with any hi-fi purchase.

3. Your TEN PLUS has to have been originally purchased from an authorized Audio Control dealer. You do have to be the original owner to take advantage of the five-year warranty, but the date of purchase is still important so be sure to get the sales slip from the original owner.

4. You can't let anybody who isn't (a) the Audio Control factory; or (b) someone authorized in writing by us, work on your Audio Control TEN PLUS. If anyone other than (a) or (b) messes with it, that voids the warranty.

5. The warranty is also NOT in effect if the serial number has been altered or removed, or if the Audio Control TEN PLUS is used improperly. Now, that sounds like a big loophole, but here's all we mean by it. Unwarranted abuse is (a) physical damage (our consumer products are not meant to prop up bookcases or get hauled around in tool cases, etc. This is a HOME hi-fi unit, not a bash-it-about utility equalizer, so if you crunch it, we can't be responsible); (b) improper connection, patch the phono jacks into a line socket or hook it to the speaker terminals on your power amp and we aren't responsible



... high input signals could fry the innards; (c) sadistic things you shouldn't do to any electronics, such as get them wet, too hot, dirty, etc.

Assuming you conform to numbers 1 - 5, and it isn't all that hard, we get the option of deciding whether to fix your old unit or give you a new one. (See "What to do if you need service.")

### **LEGALESE SECTION.**

This is the only warranty given by Audio Control. This warranty gives you specific legal rights, and you may also have rights which vary from state to state. Promises of how well your TEN PLUS will work are not implied by this warranty. Other than what we've covered in this warranty, we have no obligation, express or implied. Also, we will not be obligated for direct or indirect consequential damage to your system caused by hooking up the Audio Control TEN PLUS.

Failure to send in the properly completed warranty card negates any service claims.

### **WHAT TO DO IF YOU NEED SERVICE.**

First, contact Audio Control. In writing, at: P.O. Box 3199, Lynnwood, Washington 98036 (Attention: Service Dept.). Or phone us at: (206) 775-8461.

We'll help you make arrangements to have the unit sent back to the factory for service. That means recommending shipping methods and working with you to see if it really IS broken.

In either case, proof of purchase MUST be included with the unit (that sales slip or receipt we've been harping about). And send a brief note telling us what's wrong with the unit. (You'd be surprised how many folks forget this.)

The normal service time at the factory is less than ONE day! The rest is shipping time.

You're responsible for freight or postage when sending your unit to the factory. Actually, we recommend UPS (United Parcel Service) emphatically over the Pony Express Postal Service. UPS is more reliable and faster, too.

We'll pay return freight, and practice what we preach about using UPS on the return.

**AudioControl**™

22313 70th Ave. West  
Mountlake Terrace, WA 98043  
Phone (206) 775-8461

