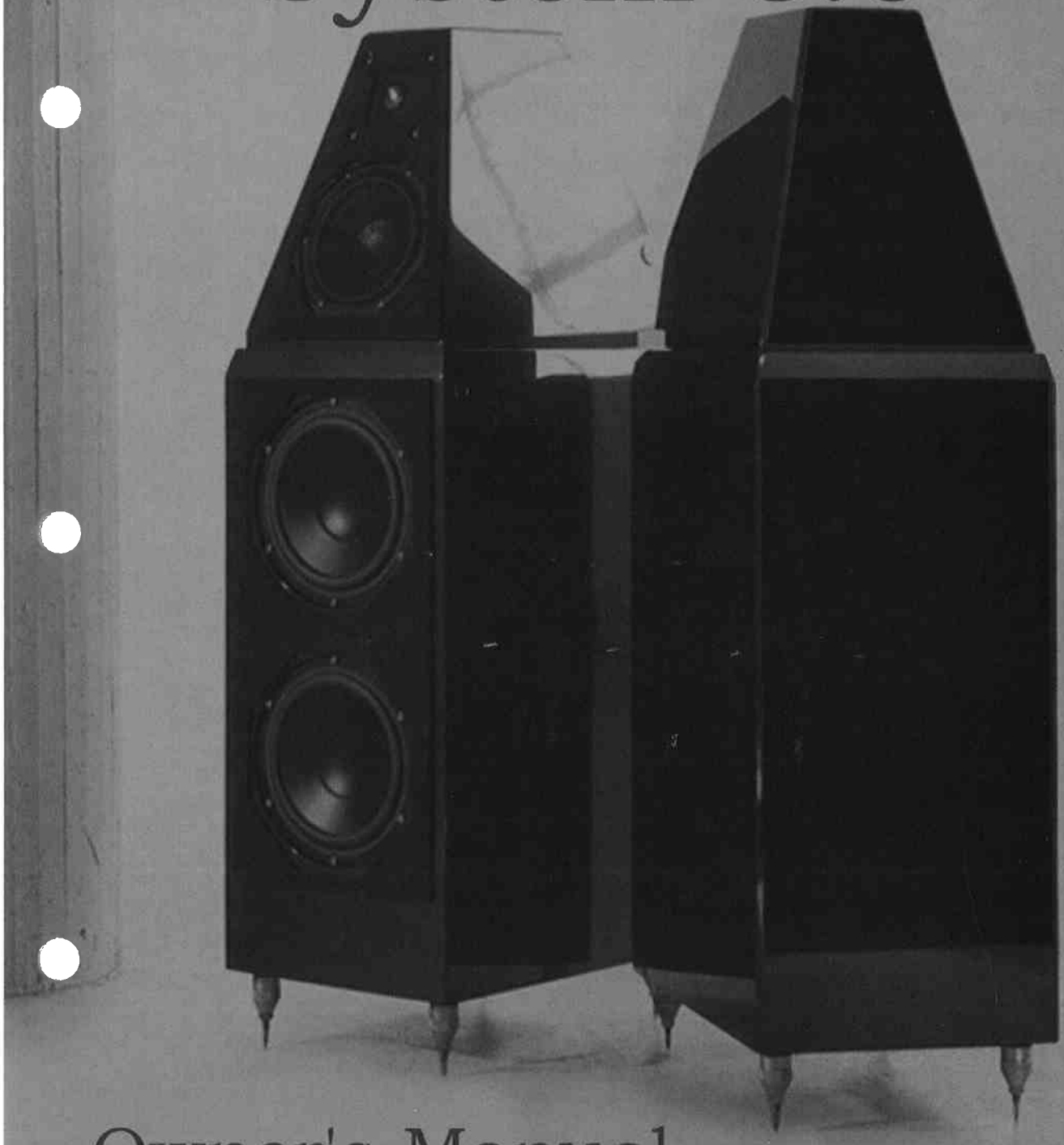
WATT / PUPPY

# System 6.0



## Owner's Manual

This manual was produced by the Wilson Audio Engineering Department in cooperation with Sales and Marketing. The information contained here in is subject to change without notice. Current Revision 1.0, if you are in need of a more recent manual please contact your dealer.

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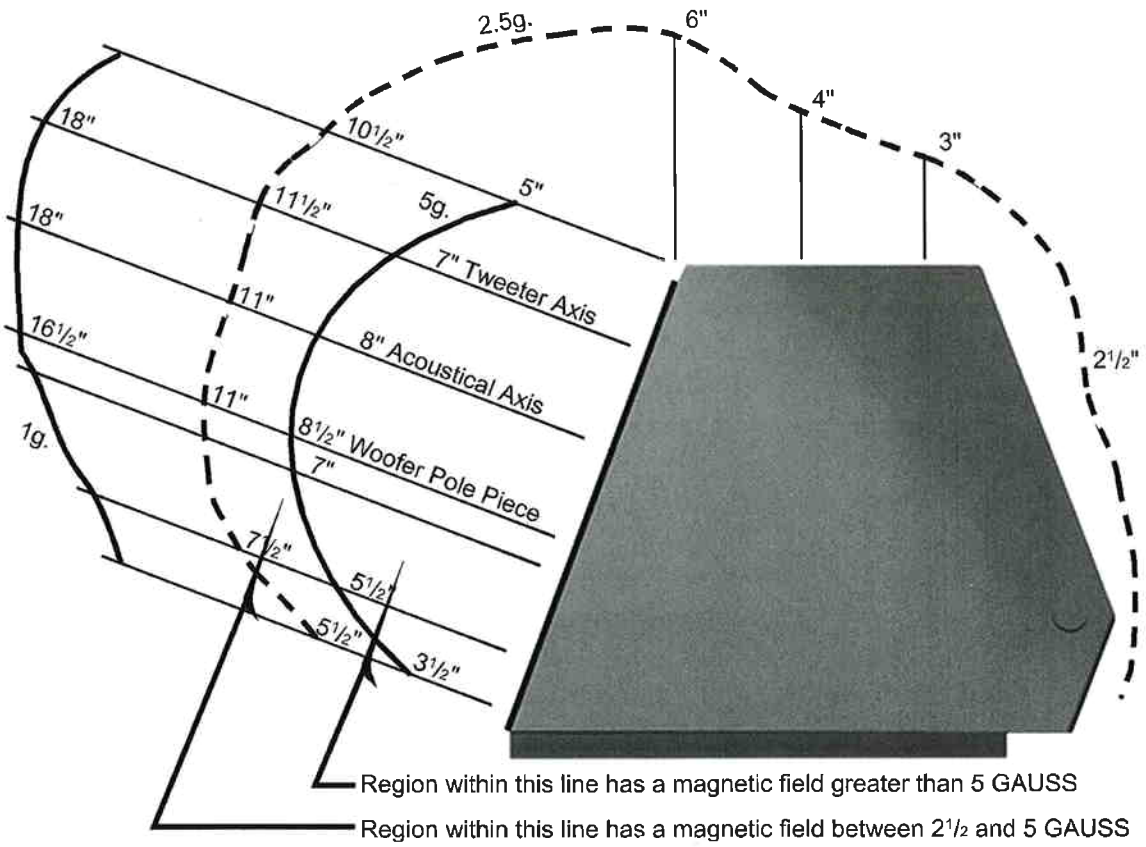

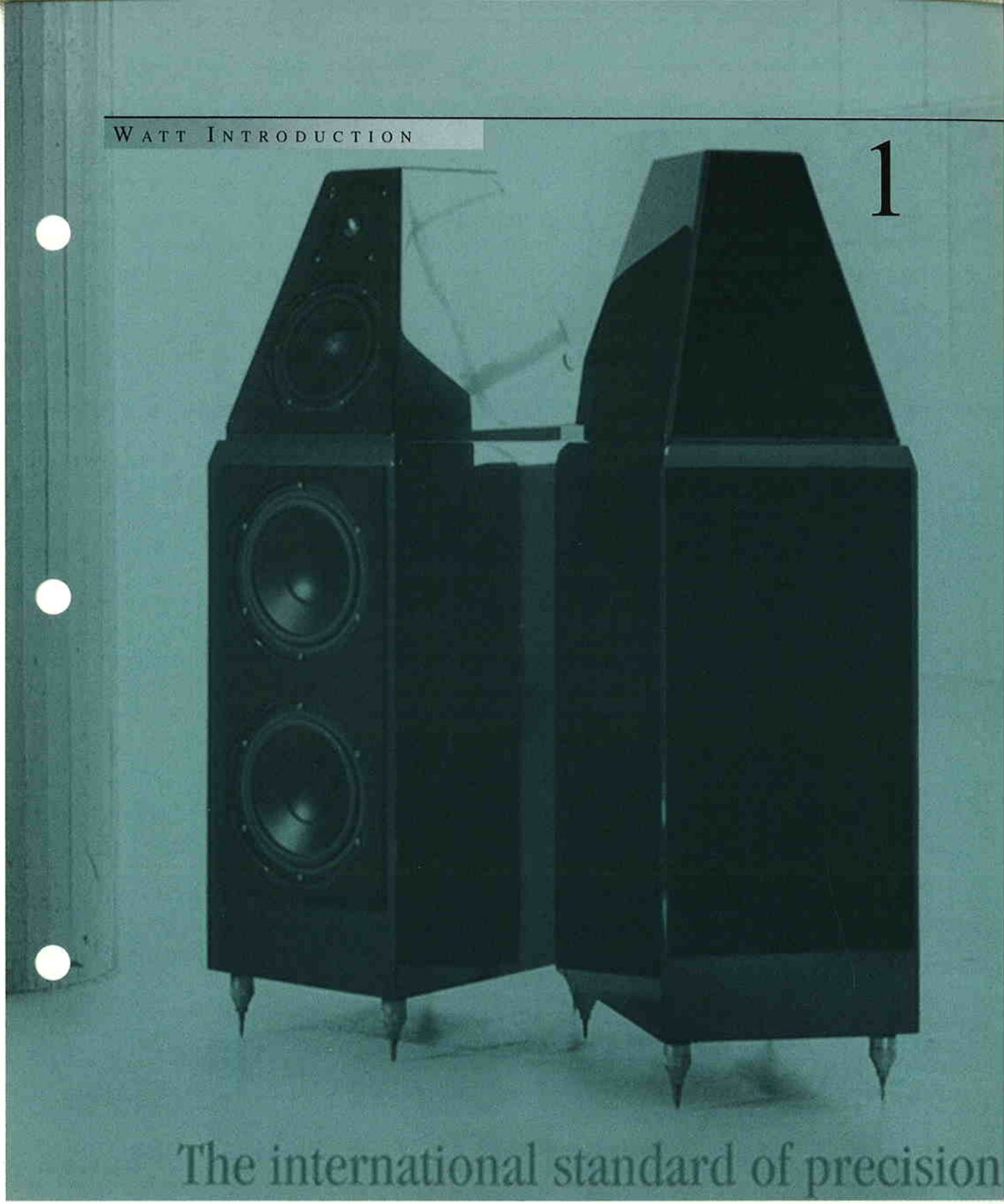

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*Although they are two separate products, the Wilson Audio WATT and Puppy are almost invariably used together.Thus, it seems appropriate to combine information regarding their use into one convenient manual.*

## APPLICATIONS

Your WATT (Wilson Audio Tiny Tot) precision loudspeaker system was designed and developed by David A. Wilson to serve as a highly accurate yet portable professional monitor for on-location recording work. Microphone pattern selection and placement as well as master tape evaluations may be quickly and correctly performed using the WATT. The extraordinary transparency, coherence, and dynamic linearity of the WATT also make it ideal for the sonic evaluation of audio hardware and software, including associated electronic audio equipment, such as, amplification systems, D/A converters, passive circuit components, signal cables, solders, and contact treatments. Its capabilities of high resolution, accurate tonal and harmonic integrity, and unsurpassed sound-stage recreation make it an ideal system for the most demanding music lovers. In the application as a center channel for video systems the WATT (usually with A.V. Puppy), provides unrivaled dialogue intelligibility and convincing dynamics. The WATT's size and color options allow it to be integrated harmoniously into a wide variety of fine interior decors.

network uses multiple slopes to achieve acoustical phase linearity. Minimum energy/ time-storage behavior in the crossover is achieved by using only the finest audio-grade propylene capacitors, OFC air-core inductors, and time coherent wire. The components are matched to better than 0.1% tolerance. The drivers were selected because of their frequency response linearity, impulse stability, and most important, their intrinsic musical quality.

## ENCLOSURE MATERIALS TECHNOLOGY

The enclosure of your WATT loudspeaker system is machined from a unique material composed of ceramic and mineral filled methacrylate polymer. This material has been chosen because it provides a nearly ideal blend of rigidity, mass, and internal vibration damping. Ideally, an enclosure material should be infinitely rigid to preserve dynamic contrasts, while at the same time it should have infinite internal damping. To satisfy the first demand, the enclosure could be made out of diamond, which would of course be prohibitively expensive! To satisfy the second demand, the ideal enclosure could be made out of rubber, but such an enclosure would exhibit very poor dynamic linearity. Because of its brittleness, the WATT enclosure material is a much more demanding material to work with than wood or metal.

THE WATT ENCLOSURE MATERIAL SHOULD BE TREATED AS THOUGH IT WERE CERAMIC! THE MATERIAL WILL NOT BEND, BUT INSTEAD WILL CRACK. FOR THIS REASON USERS OF THE WATT SHOULD NOT TO ATTEMPT DISASSEMBLY OF THE SYSTEM.

## Care of the Finish of Your WATTs

Your WATT loudspeaker enclosures are hand-painted with Wilsongloss™ paint and hand-polished to a high luster. While the paint seems quite dry to the touch, final curing and complete hardening takes place over a period of several weeks. To protect the finish of the WATTs during final manufacture, shipment, and setup in your listening room, we have applied a removable layer of protective film over the finish. We recommend that this film be left in place until the speakers are in their final location in your listening room. Once you have determined their final position, remove the film by peeling it off. **Do not leave this film on indefinitely, as it will leave impressions on the paint.** It is important that the delicate paint finish of the WATT be dusted carefully with the dust cloth, which has been provided. We recommend that the following procedure be observed when dusting the speakers:

- Blow off all loose dust
- Using the special dust cloth as a brush, gently whisk off any remaining loose dust
- Shake out the dust cloth
- Dust the finish, using linear motions in one direction parallel to the floor. Avoid using circular or vertical motions.

Because the paint requires a period of several weeks to fully cure, we recommend that no cleaning fluids such as glass cleaners be used during this initial period of time. When the paint is fully cured, heavy finger prints and other minor smudges may be removed with a glass cleaner. Always use the dust cloth. Stronger solvents are not recommended under any circumstances. Consult your dealer for further information if required. Periodic polishing may be desired over the years to maintain the high luster of the finish. We recommend a non-abrasive carnuba-based wax and soft cloth.

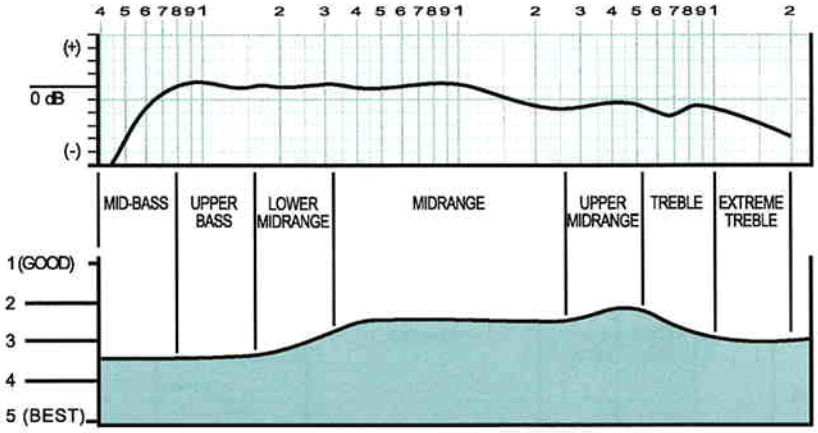
## SELECTION OF INTERCHAGEABLE TUNING PORTS

The damping factor of an amplifier is a function of the amplifier's output impedance into a given load impedance. Solid state amplifiers, due to their intrinsically low output impedance, tend to have a higher damping factor than vacuum tube amplifiers. Vacuum tube amplifiers typically are transformer-coupled in their output stage and the secondary windings of the output transformer present a relatively high source impedance. This source impedance is a parameter which must be considered in the tuning of the air volume of the loudspeaker enclosure. An interesting theoretical consideration is that if a loudspeaker is designed around a solid state amplifier and then used with a vacuum tube amplifier, it will tend to sound loose and tubby in the mid-bass regions. The WATT loudspeaker system allows you to precisely tailor the air volume tuning of the enclosure to the amplifier of your choice.

Your WATT loudspeaker comes equipped with two sets of interchangeable tuning ports. The ports connect on the back of the loudspeaker system and are affixed with three (3) button-head stainless steel screws. An allen key is provided which can be used to remove these screws to facilitate exchange of the ports. Typically, WATTs are shipped with the "D.F. 100-400" ports installed. This range encompasses the majority of high performance solid state amplifier types. Most vacuum tube amplifiers have damping factors of from 20 to 80, and we recommend the port which is labeled "D.F. 20-80."

### TECHNICAL NOTE

*If the user wishes to test the polarity of the WATT 6 with a battery, connect the plus (+) terminal of the battery to the RED (+) input terminal of the WATT and the negative (-) terminal of the battery the BLACK (-) terminal of the WATT. The results of this test will show the WATT woofer to move inward. This is the correct driver movement in response to a D.C. signal.*



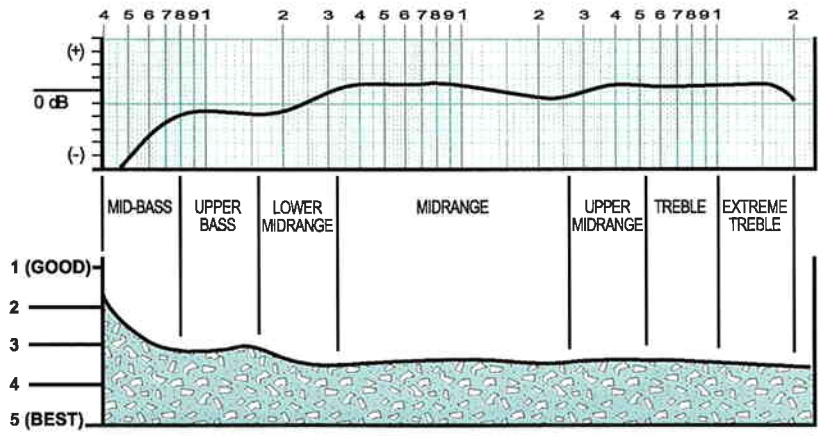

| AREA | IMAGE FOCUS | IMAGE PLACEMENT | AMBIANCE |
|---|---|---|---|
| CENTER | 2 | 2 | 2 |
| EXTREME SIDES | 2 | 2 | 1 |
| REAR FIELD | 1 | 1 | 1 |

1=GOOD 5=BEST

Figure 3

## WATT-24 INCH STAND

The third illustration (figure 5), shows the effects of the speaker being raised an additional 6 inches off the floor. Here the sound staging properties will be excellent as will high frequency linearity and overall lucidity of detail. There will, however, be a noticeable loss in bass and lower midrange response due to the lack of 2 pi steradian support of the direct output of the woofer. Generally, as the WATT is raised up off the floor, the sound becomes "lighter" in balance as the speaker's height is increased. The recommended range of mounting heights is from 18 inches to 28 inches.

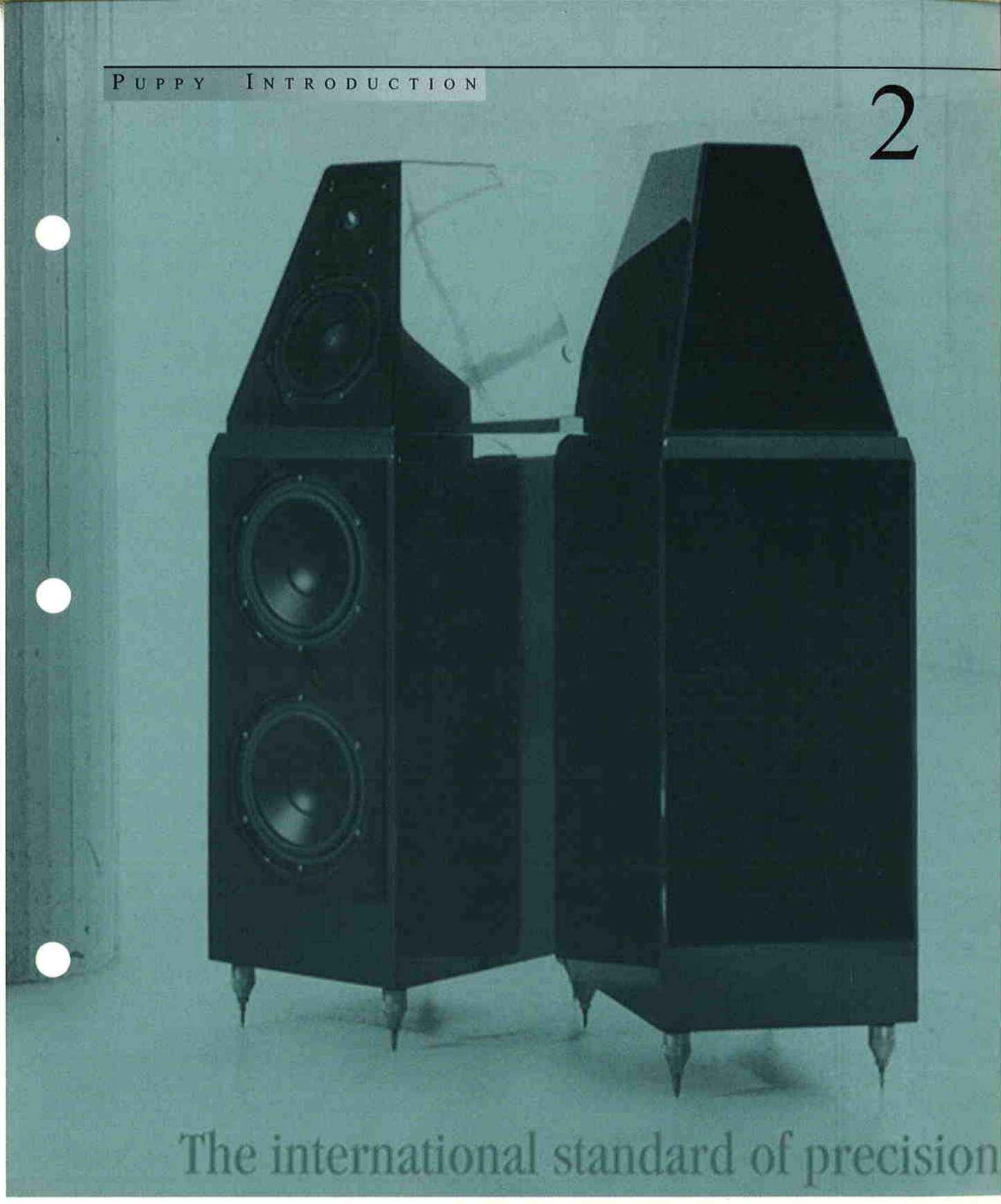




| AREA | IMAGE FOCUS | IMAGE PLACEMENT | AMBIANCE |
|---|---|---|---|
| CENTER | 3 1/2 | 3 1/2 | 4 1/2 |
| EXTREME SIDES | 3 1/2 | 3 1/2 | 4 |
| REAR FIELD | 3 1/2 | 3 | 3 1/2 |

1=GOOD 5=BEST

Figure 5

FOR BEST LOW FREQUENCY TRANSIENT RESPONSE AND CLEANEST MID-RANGE, ALWAYS USE SPIKED FEET ON THE STAND - BETWEEN THE STAND AND THE FLOOR, AND OPTIONALLY BETWEEN THE STAND AND THE SPEAKER. IF THE STAND HAS HOLLOW LEGS, FILL THEM WITH SAND TO ELIMINATE UPPER MIDRANGE RINGING IN THE STAND.



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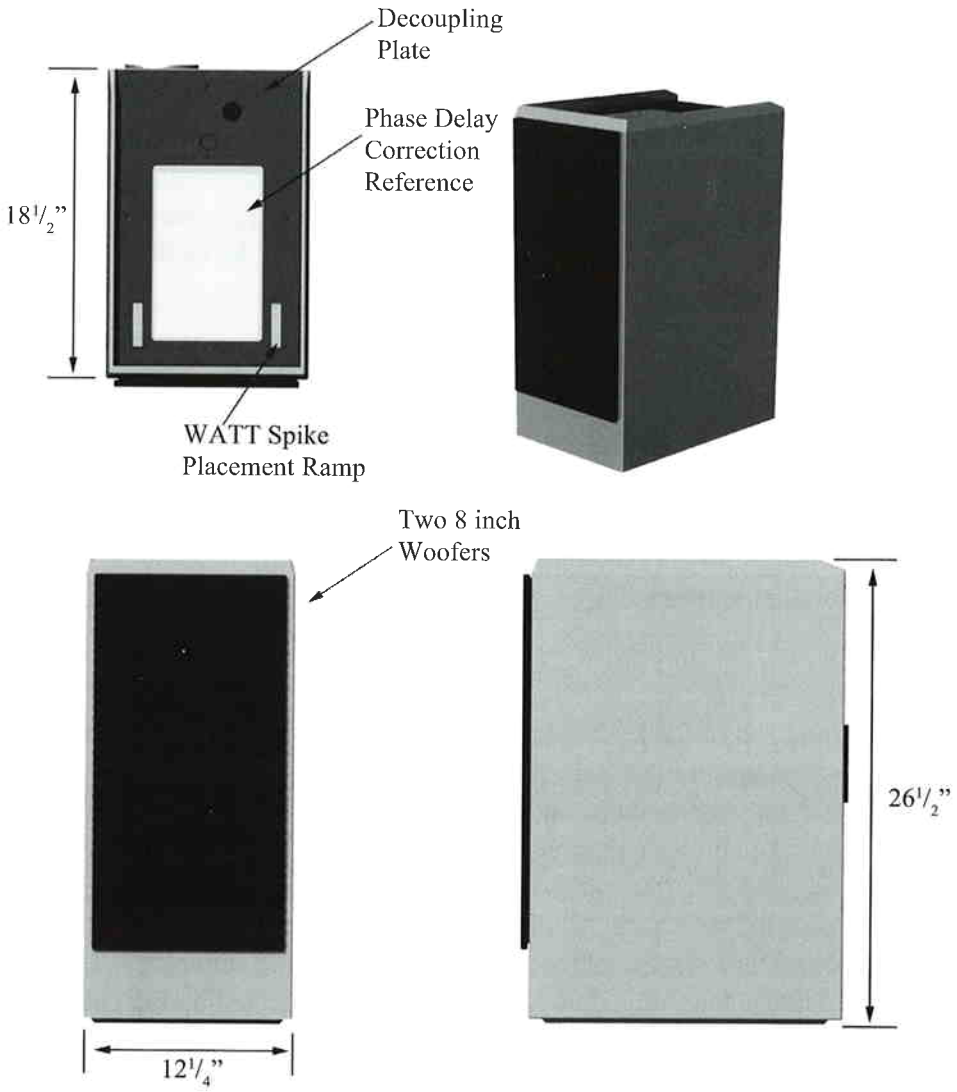
# PUPPY 6:

## COMPONENTS AND DIMENSIONS



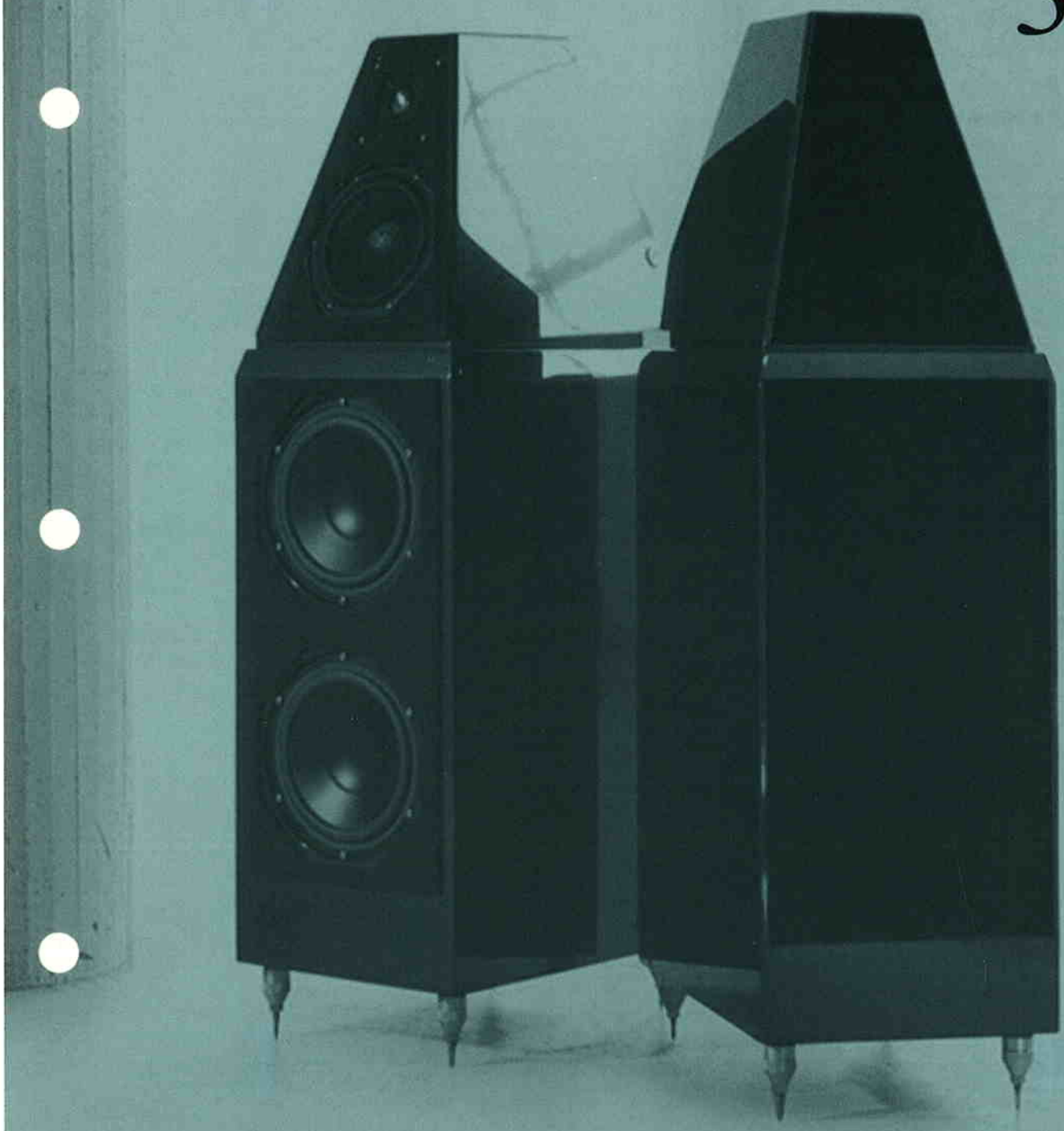
## ORIGINAL DESIGN CONSIDERATIONS

The original Puppy high speed woofer was introduced in 1988, two years after the first WATT, series I. Prior to the Puppy, users of the WATT who desired more low frequency extension, would add various subwoofers from other manufacturers. The results were unpredictable and often compromised overall musical performance. It became clear to Mr. Wilson that none of these subwoofers provided the speed necessary to blend seamlessly with the lightning-quick WATT.

Thus, in the initial design phase of the Puppy, Wilson concluded that what was needed was a highly articulate, low distortion, non-resonant, compact high-speed woofer with robust power handling, high sensitivity and excellent reliability. In every series of puppy, two very high quality low-frequency drivers are driven in parallel in a rigidly cross-braced, tuned enclosure to quickly dampen spurious resonances in the structure. The crossover network in the base of the Puppy is always composed of the finest audio grade components, held to tolerances better than 0.1%.

### PUPPY 6.0

In the series 6 Puppy, previously unavailable materials have allowed Wilson Audio to increase internal volume, with only a slight increase in overall size. This volume increase contributes to a very significant extension in the low frequency response, and improved linearity in the mid to upper bass. The overall size is not significantly larger than previous WATT/Puppy systems, and that is very important. These systems are intended to provide state of the art musical sound reproduction, and even where space is at a premium.



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## ROOM REFLECTIONS

Figure 7 (below) illustrates the 3 most commonly encountered room reflection problems, slap-echo, standing waves, and comb filter effects.

### SLAP-ECHO

Probably the most obnoxious form of reflection is the "slap echo." In slap echo, primarily mid-range and high frequency sounds reflect off of two parallel hard surfaces. The sound literally reverberates back and forth until it is finally dissipated over time. You can test for slap echo in any room by clapping your hands sharply in the middle of the room and listening for the characteristic sound of the echo in the mid-range. Slap echo destroys the sound quality of a stereo system primarily in two ways:

- Adding harshness to the upper mid-range and treble through energy time storage
- Destroying the delicate phase relationships which help to establish soundspace and image localization clues.

### 3 COMMONLY ENCOUNTERED REFLECTION PROBLEMS

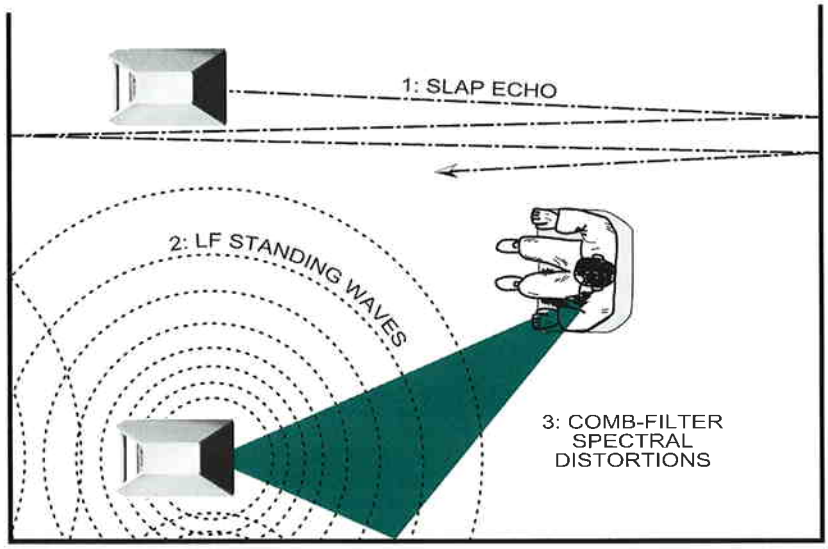



Figure 7

- Sound staging- LF component of image shifted

Standing waves are more difficult to correct than slap echo because they tend to occur at lower frequencies, whose wave lengths are long enough to be ineffectively controlled by absorbent materials such as Sonex. Moving speakers about slightly in the room is, for most people, their only control over standing waves. Sometimes a change of placement of as little as one inche can dramatically alter the tonal balance of a system because of standing wave problems. Fortunately, minor low frequency standing waves are sometimes well controlled by positioning ASC tube traps in the corners of the room. Very serious low frequency accentuation usually requires a custom-designed bass trap system.

Low frequency standing waves can be particularly troublesome in rooms constructed of concrete or brick. These materials trap the bass in the room, unless it is allowed to leak out of the room, through large window and door areas.

In general, placement of the speaker in a corner will excite the maximal number of standing waves in a room, and is to be avoided for most direct radiator, full range loudspeaker systems. Some benefit is achieved by placing the stereo pair of loudspeakers slightly asymmetrically in the listening room so that the standing waves caused by the distance between one speaker and its adjacent walls and floors are not the same as the standing wave frequencies excited by the dimensions in the other channel.

**Comb Filter Effect**

A special type of standing wave, noticeable primarily in the mid-range and lower higher frequencies is the so-called "comb filter effect".

Acoustical comb filtering occurs when sound from a single source, such as a loudspeaker, is directed toward a microphone or listener at a distance. The first sound to reach the microphone will be the direct sound, followed by delayed reflected sound. At certain frequencies cancellation occurs, because the reflected sound lags in phase relative to the direct sound. This cancellation is most apparent where the two are 180 degrees out of phase. There is augmentation at other frequencies where the direct and the reflected sounds arrive in phase. Because it is a function of wave length, the comb filter effect will notch out portions of the audio spectrum at regular octave-spaced intervals.

## Resonances

Resonances in listening rooms are generally caused by two sources:

- The structures within the listening room
- The volume of the air itself in the listening room

### Structural resonances

Structural resonances are familiar to most people as buzzes and rattles, but this type of resonance usually only occurs at extremely high volume levels, and is usually masked by the music. In many wood frame rooms, the most common type of structural resonance problem is "booming" of walls and floors. You can test for these very easily by tapping the wall with the heel of your hand or stomping on the floor. If it is a wooden floor, this is done to detect the primary spectral center of the resonance. To give you an idea of what the perfect wall would sound like, imagine rapping your hand against the side of a mountain. Structural wall resonances generally occur in the low to mid-bass frequencies and add tonal balance fullness to any system played in that room. They too are more prominent at louder levels, but their contribution to the sound of the speaker is more progressive. Rattling windows, picture frames, lamp shades, etc. can generally be silenced with small pieces of caulk or with blocks of felt. Short of actually adding additional layers of sheet rock or book shelves, to flimsy walls, however, there is little that can be done to eliminate wall resonances.

### Air Volume Resonace

The volume of air in a room will also resonate at a frequency determined by the size of the room. Larger rooms will resonate at a lower frequency than will smaller rooms. Air volume resonances, wall panel resonances, and low frequency standing waves, together, combine to form a low frequency coloration in the sound. At its worst, it is a grossly exaggerated fullness, which tends to obscure detail and distort the natural tonal balance of the speaker system. Occasionally, however, there is just enough resonance to give a little added warmth to the sound... an addition some listeners prefer. Tube traps manufactured by the ASC corporation have been found to be effective in reducing some of these low frequency room colorations. While custom designed and constructed bass traps, such as perforated Helmholtz resonators, provide the greatest degree of low frequency control.

# COMMON ROOM SHAPES:

## OPTIMUM SPEAKER PLACEMENTS

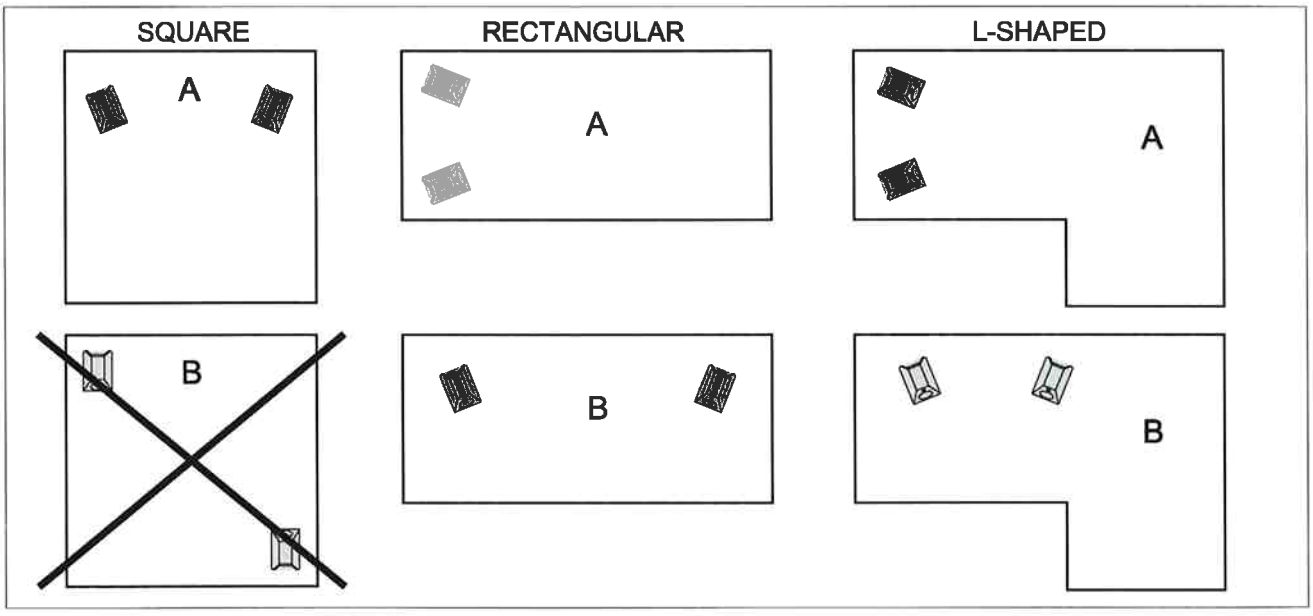
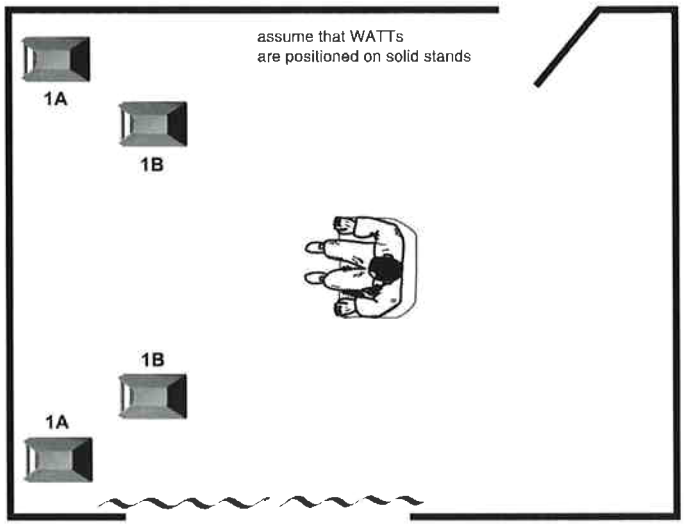
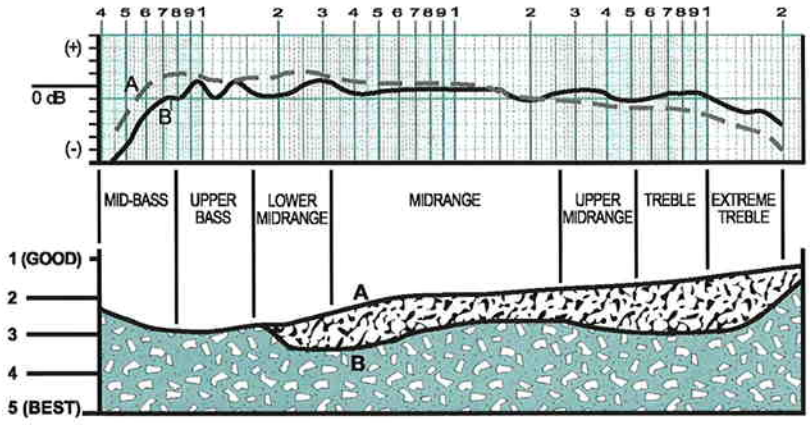



Figure 9




**EXAMPLE 1A:** Illustrates the performance of corner-situated WATTs

**EXAMPLE 1B:** Illustrates the performance of WATTs placed out in the room, away from walls, but not toed in.




| AREA | IMAGE FOCUS | IMAGE PLACEMENT | AMBIANCE |
|---|---|---|---|
| CENTER | A=2 B=3½ | A=3 B=3½ | A=2 B=3½ |
| EXTREME SIDES | A=2 B=3½ | A=2 B=3 | A=2 B=4 |
| REAR FIELD | A=2 B=3 | A=2 B=3 | A=2 B=4 |

1=GOOD 5=BEST

Figure 10

## WATT- In room Placement, with toe, and Acoustical Treatment

Let us now go to figure 12, to see the benefits in performance which can be achieved by modest acoustical treatment of the room. With the speakers in the same location as in figure 11, we note the addition of tube traps in the corners of the listening room, as well as foam or Sonex panels placed between and behind the speakers, against the back wall, as well as along the wall behind the listener and over to the side next to the listener. The tube traps can be seen to smooth out the performance of the upper bass and lower midrange, while at the same time not compromising low frequency extension. Slap echo is controlled by the sound absorbing panel on the wall behind the speakers in the center of the sound stage and by the two panels on the back wall behind the listener. These two room treatments, namely tube traps and judicious placement of sound absorptive panels, can elevate the sonic performance of virtually any speaker system in a typical domestic listening room.

Should the listening position be as far from the speakers as possible, even up against a back wall? Figure 12, position B shows the effect of being seated near a back wall, some distance from the speaker. We can see a dramatic increase in upper bass and mid bass output of the system, actually due to standing wave reinforcement near the back wall, as well as the expected high frequency roll off resulting in the longer air path of the sound to the listener.

It should be noted that, in comparison to other speaker systems, even this compromised level of sound staging performance and resolution of low level detail still represents very good performance indeed.

## Speaker Placement vs. Listening Position

The location of your listening position is as important as the careful setup placement of your WATT/Puppy speakers in your room. The listening position should ideally be no more than 1.1 to 1.25 times the distance between the tweeters on each speaker. Therefore, in a long rectangular room of 12' x 18', if the speaker tweeters are going to be 9' apart, you should be sitting 9'11'' to 11'3'' from the speaker. This would be about halfway down the long axis of the room. Experiment carefully for best low frequency response.

Some people place the speakers on one end and sit at the other end of the room. Needless to say, this will not yield the finest sound. Carefully consider your listening position for optimal performance. Our experience has shown that any listening position which places your head closer than 14" to a room boundary will diminish the sonic results of your listening.

## Choosing a Listening Position

Decide where you want your favorite listening position to be. Please remember that your WATT/Puppys can fill almost any room with the most beautiful sound. However, for the time aligning advantage, we want to ensure that you get all the benefits possible with the gruop delay adjustment features that are built into this design. For this purpose we ask you to consider the following questions:

What is the main purpose of your WATT/Puppys? Is it for a listening room dedicated to 2-channel audio? If yes, you should choose your position carefully to yield the finest sound. Wilson Audio uses a formula: The distance between the tweeters of the two channel times 1.2 equals the distance you should sit from each loudspeaker.

For instance, if you measure the distance between the center of the left channel tweeter to the corresponding right channel tweeter and it is equal to 10 feet, multiply it by 1.2. This means that you should sit approximately12 feet from each WATT/Puppy channel.

Are your WATT/Puppys dedicated for a home theater?

Are you going to sit on a couch, or will there be multiple rows of chairs?

If it is a couch, you should center the loudspeakers on the center position of the couch.

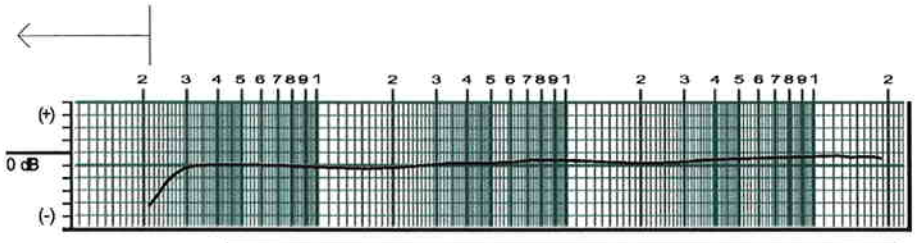
Multiple rows of chairs - In this case you should calculate the 1.2 times equation on your second row of seating. Now more people will enjoy the power of your WATT/Puppys.

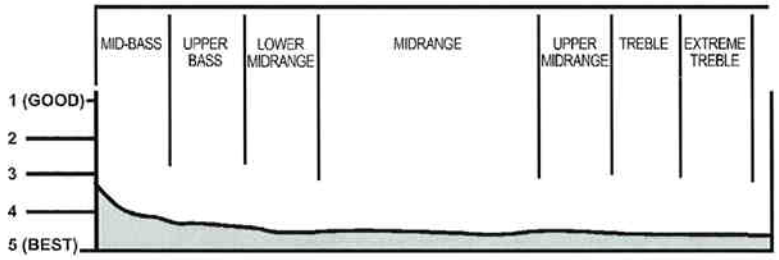
Do you still want to listen to 2 channel music at its highest quality? In this way you can enjoy optimized sound from that second seat.

Ideally, the speakers should not be positioned too far from the listener, if maximum resolution of low level detail is required (near-field monitoring). If possible, the speakers should be positioned out into the room, slightly asymmetrically away from side and rear walls. The speakers should be toed-in toward the listener, preferably so that the listener at his seated position can barely see the surface of the inner side panel of the WATT as he faces the speaker. It is recommended that a distance of 2-3 feet, and possibly more, be maintained between the WATT and the rear walls and a distance of at least 1 1/2 feet be maintained between the front panel of the WATT and reflective side walls. Use of sound absorbent materials may reduce the space requirement somewhat. Experiment for each room.

By following the guidelines in this manual and your own common judgement, your new WATT/Puppy speakers will provide you with a lifetime of pure music reproduction.

Note:Extension With Puppy

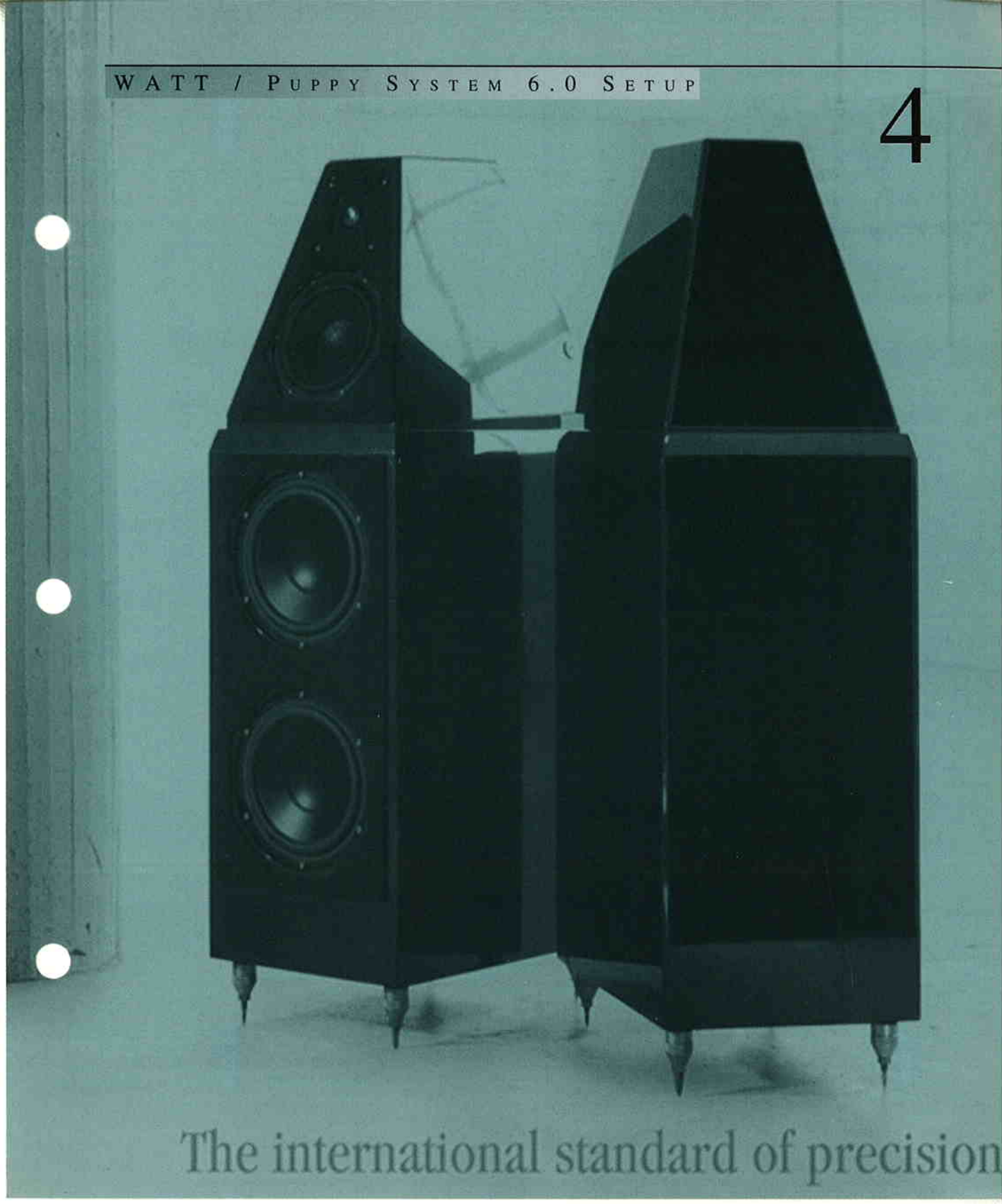



| AREA | IMAGE FOCUS | IMAGE PLACEMENT | AMBIANCE |
|---|---|---|---|
| CENTER | 5 | 5 | 5 |
| EXTREME SIDES | 5 | 5 | 5 |
| REAR FIELD | 5 | 5 | 5 |

1=GOOD 5=BEST

Figure 13



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*Note: Before setting up the Watt/Puppy System 6.0 study carefully the previous section on room acoustics. It provides valuable information on determing the ideal room location for your speakers.*

## PREPARATION

You will need the following items:

- Supplied hardware kit
- Tape measure
- Geometric timing charts (Appendix A)
- Known listening position

Take a moment to familiarize yourself with the top of the Puppy. It contains information that will be needed during the setup (see Figure 14 below).

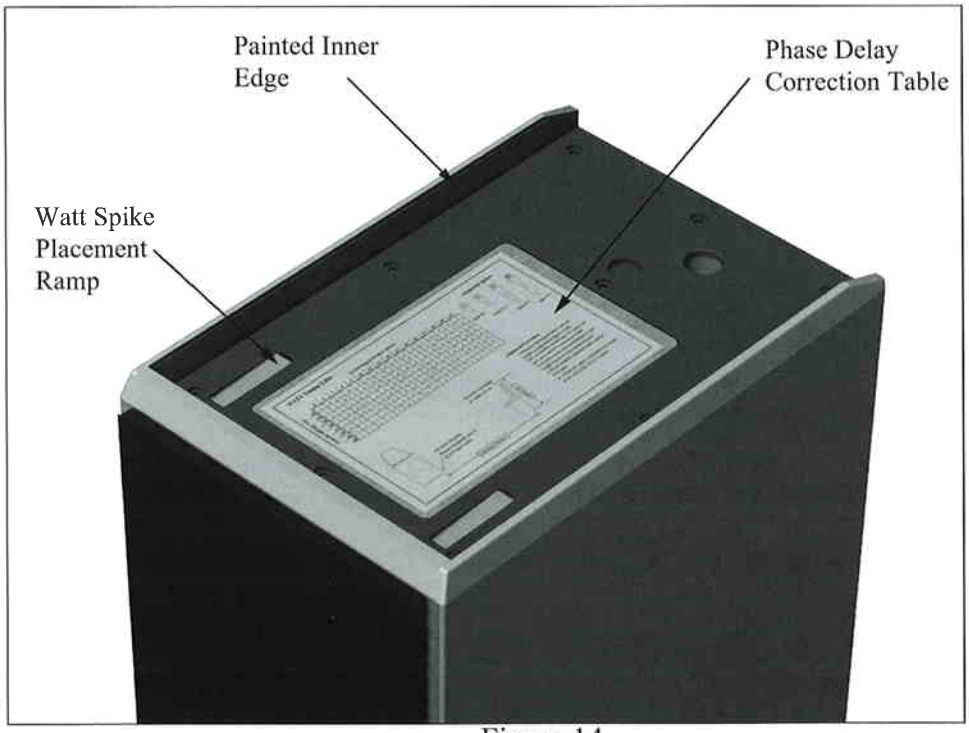



Figure 14

- Carefully, place WATT onto spike placement ramp on top of the Puppy about 3 inches from the front. *Be careful not to damage the lower edges of the Watt or Puppy top*

- Grasping the handle and top of WATT, slide the WATT forward until the spikes just slide off the ramp (see Figure 16 below)

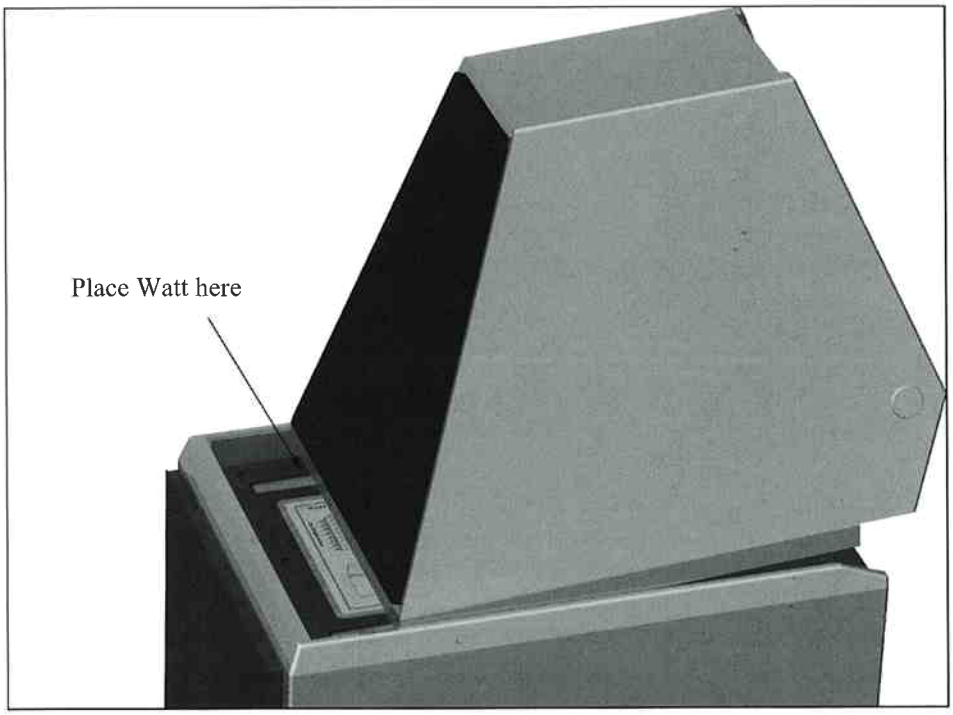



Figure 16

## PUPPY TAIL CONNECTION

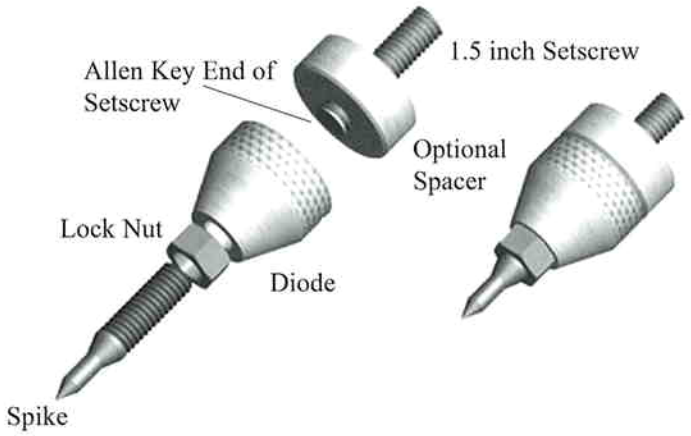
The correct connection of the Puppy Tail in the WATT/Puppy system 6.0 is:

- Connect the other RED lug at the load end of the tail to the RED terminal on the WATT.
- Connect the other BLACK lug at the load end of the tail to the BLACK terminal on the WATT.

*Note: Please resist the temptation to invert the polarity of the Puppy Tail in the WATT/Puppy System 6.0. Such an inversion will produce entertaining ambient effects, but destroys the linearity and harmonic structure of the system.*

# PUPPY PAWS
## ASSEMBLY DIAGRAM

**Option 1**
(0-1 Spacers)




**Option 2**
(2 Spacers)

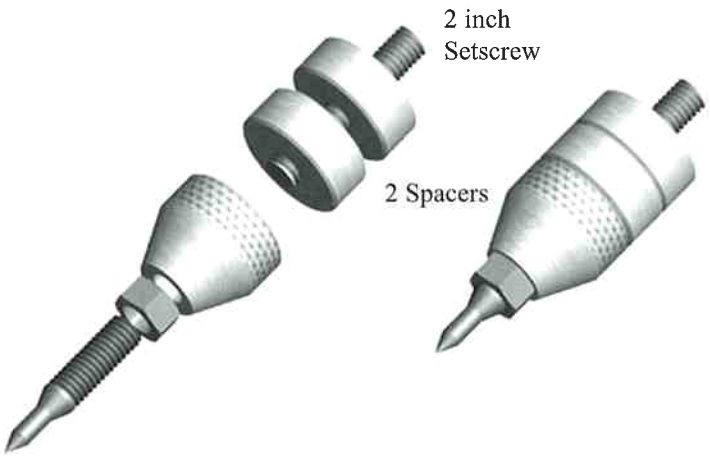



Figure 18

# A

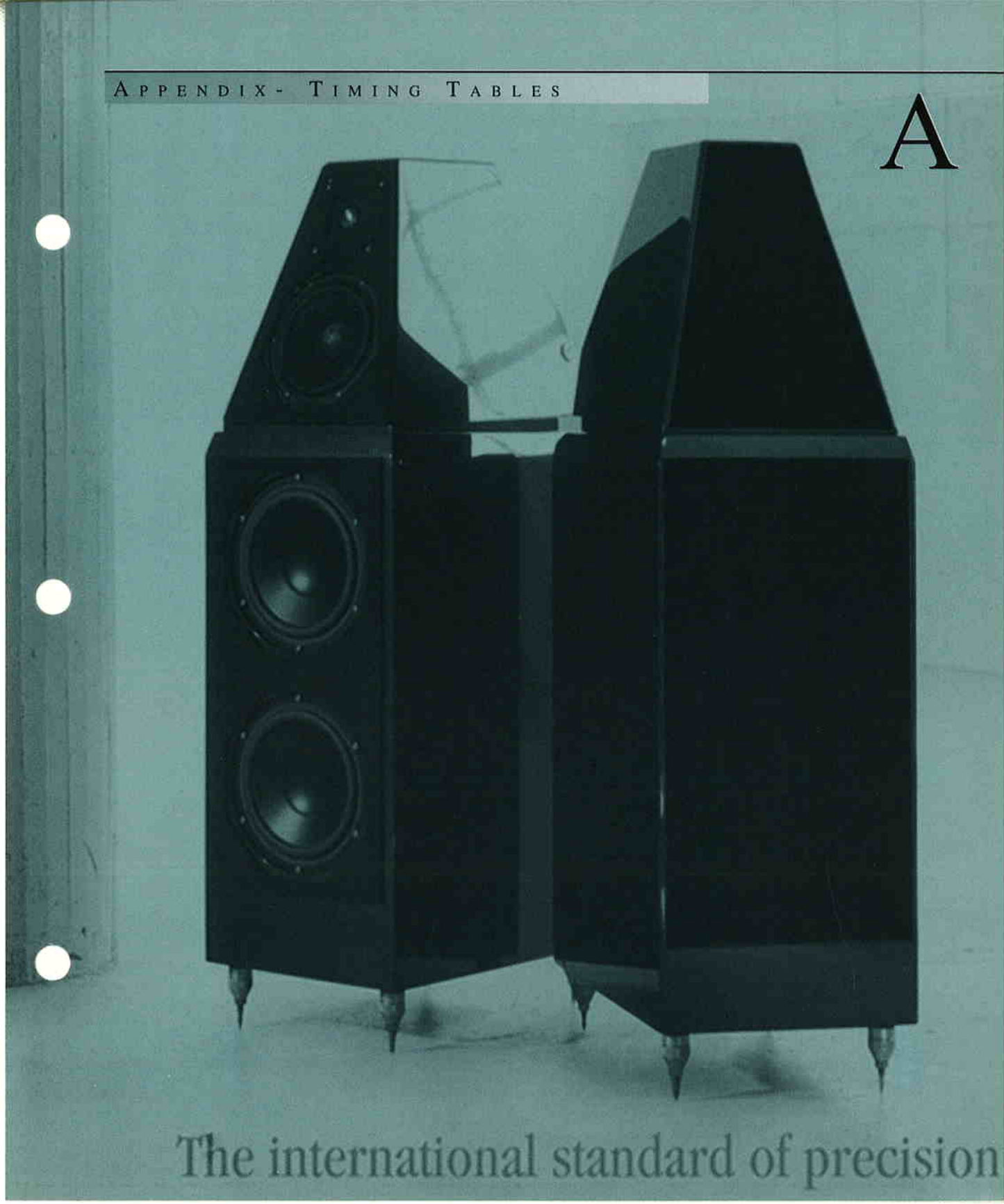


Table to be used when using no Puppy Spacers

**Listening Distance (feet)**

| Ear Height (inches) | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 36 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 38 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 40 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 42 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| 44 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| 46 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
| 48 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Table to be used when using 1 Puppy Spacers

**Listening Distance (feet)**

| Ear Height (inches) | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 36 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 38 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 40 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 42 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 44 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| 46 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| 48 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

# W A R R A N T Y

# &

# P R O D U C T

# R E G I S T R A T I O N

WILSON AUDIO SPECIALTIES INC.

Wilson Audio Specialties, Inc.
2233 Mountain Vista Lane
Provo, UT 84606

Tel: (801)377-2233
Fax: (801)377-2282

Dear WATT/Puppy customer,

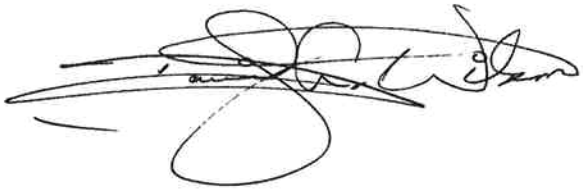
Thank you for your purchase of the Wilson Audio WATT/Puppy loudspeaker. All of us at Wilson Audio desire that this precision instrument will provide you with many years of musical satisfaction.

Your 90-day basic warranty is enclosed. Please note the relevant information and retain the warranty for your records.

## IMPORTANT!

If you desire the free extension of the warranty period to five (5) years, please immediately fill out the enclosed Warranty Registration Form and subsequent documents, and make certain that Wilson Audio receives them within 30 days from the date of product delivery to you. All information sent to us is confidential, and will not be released to any party outside of Wilson Audio without your written consent.

Sincerely,



David A. Wilson
President
Wilson Audio Specialties, Inc.

# WILSON AUDIO LOUDSPEAKER

# LIMITED WARRANTY

## TERMS AND CONDITIONS

### LIMITED WARRANTY

Wilson Audio warrants its loudspeakers to be free of manufacturing defects in material and workmanship, subject to the conditions hereinafter set forth for a period of 90 days from the date of purchase by the original purchaser, or five (5) years, if a Warranty Registration Form has been correctly filed at Wilson Audio, no later than 30 days after product delivery to the customer.

### CONDITIONS

This warranty is subject to the following conditions and limitations. The Warranty is void and inapplicable if the product has been used or handled **other than** in accordance with the instructions in the owner's manual, abused or misused, damaged by accident or neglect or in being transported or the defect is due to the product being repaired or tampered with by anyone other than Wilson Audio, or an authorized repair center. Most repairs can be made in the field by an authorized Wilson Audio agent. In instances when return to Wilson Audio's factory is required, a return authorization must first be obtained by the dealer or customer. Wilson Audio will pay return freight of its choice. A RETURNED PRODUCT MUST BE ACCOMPANIED BY A WRITTEN DESCRIPTION OF THE DEFECT. Wilson Audio reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.

### REMEDY

In the event that the above product fails to meet the above Warranty and the above conditions have been met, the purchaser's sole remedy under this Limited Warranty shall be to return the product to Wilson Audio or to an authorized Wilson Audio repair center where the defect will be rectified without charge for parts or labor.

# LIMITED WARRANTY

## LIMITED TO ORIGINAL PURCHASER

This Warranty is for the sole benefit of the original purchaser of the covered product and shall not be transferred to a subsequent purchaser of the product. Any subsequent purchaser should contact a Wilson Audio dealer to request a new warranty.

## DEMONSTRATION EQUIPMENT

Equipment used by an authorized dealer for demonstration purposes is warranted to be free of manufacturing defects in materials and workmanship for a period of five (5) years from the date of shipment to the dealer. Demo equipment needing warranty service may be repaired on-site or, if necessary, correctly packed and returned to Wilson Audio by the dealer at his sole expense. Wilson Audio will pay return freight of its choice. A returned product must be accompanied by a written description of the defect. Dealer owned demonstration equipment sold at retail within two (2) years of date of shipment to the dealer is warranted to the first retail customer to be free of manufacturing defects in materials and workmanship for the same time periods as if the product had originally been bought for **immediate** resale to the retail customer. In other words, 90 Day basic warranty, unless extended to 5 years by return of a completed Warranty Registration.

## MISCELLANEOUS

ANY IMPLIED WARRANTIES RELATING TO THE ABOVE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. THE WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER. Some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

# USAGE PROFILE QUESTIONNAIRE

NAME _____

DATE OF PURCHASE _____

ADDRESS _____

_____

COUNTRY _____

SERIAL NUMBERS

WATT _____ & _____

PUPPY _____ & _____

WHOW _____ & _____

FINISH

BLACK ☐ WHITE ☐ GRANITE ☐ ROSEWOOD ☐

WALNUT ☐ OAK ☐ OTHER _____

DID YOUR SPEAKERS ARRIVE IN EXCELLENT CONDITION? ☐ YES ☐ NO

IF NOT, PLEASE COMMENT _____

_____

_____

_____

# WARRANTY REGISTRATION FORM

PLEASE **RETURN THESE FORMS TO WILSON AUDIO** WITHIN 30 DAYS OF PRODUCT DELIVERY TO YOU, ALONG WITH A COPY OF THE ORIGINAL SALES RECEIPT TO INSURE PROMPT REGISTRATION FOR THE 5 YEAR WARRANTY PROGRAM. KEEP ALL INFORMATION, DEALER NAME AND PHONE NUMBER, SERIAL NUMBERS, ETC., FOR FUTURE REFERENCE WHEN CALLING ABOUT SERVICE QUESTIONS.

---

DATE PRODUCT WAS DELIVERED TO YOU _____

DEALERSHIP WHERE PURCHASED _____

CITY _____ STATE _____ COUNTRY _____

SALES REPRESENTATIVE _____ DATE _____

CUSTOMER NAME _____

ADDRESS _____

CITY _____ STATE _____ COUNTRY _____

WOULD YOU LIKE TO BE PUT ON WILSON AUDIO'S MAILING LIST? ☐ YES ☐ NO

SERIAL NUMBERS _____ & _____

FINISH ON SPEAKERS _____

DID YOUR SPEAKERS ARRIVE IN EXCELLENT CONDITION? ☐ YES ☐ NO

IF NOT, PLEASE SPECIFY _____

_____

_____

# O W N E R  P R O F I L E

**1. HOW WOULD YOU DESCRIBE YOURSELF?**

A. ☐ I ENJOY THE FINER THINGS OF LIFE, BUT I AM NOT AN AUDIOPHILE.

B. ☐ I LOVE MUSIC BUT AM NOT AN AUDIOPHILE.

C. ☐ I HAVE A FAIRLY SERIOUS INTEREST IN AUDIO.

D. ☐ I AM A SELF-PROFESSED RABID AUDIOPHILE.

E. ☐ I AM AN AUDIO PROFESSIONAL.

F. ☐ I AM A MUSICIAN.

COMMENTS? QUESTIONS? _____

_____

**2. WHAT IS YOUR OCCUPATION?** _____

**3. AGE RANGE**

0-20 ☐ 21-30 ☐ 31-40 ☐ 41-50 ☐

51-60 ☐ 61-70 ☐ 71-80 ☐ 80 AND OVER ☐

**4. TO WHICH OF THE FOLLOWING AUDIO MAGAZINES DO YOU SUBSCRIBE, OR DO NOT SUBSCRIBE, BUT READ MONTHLY?**

☐ ABSOLUTE SOUND

☐ AUDIO

☐ HI-FI NEWS & RECORD REVIEW

☐ INTERNATIONAL AUDIO REVIEW

☐ STEREOPHILE

☐ STEREO REVIEW

☐ STEREO SOUND (JAPAN OR KOREA)

☐ OTHER _____

## 6. WHICH OTHER EQUIPMENT ARE YOU USING WITH YOUR WILSON AUDIO LOUDSPEAKERS?

| EQUIPMENT | BRAND | MODEL | WILSON COMPATIBILITY |
|---|---|---|---|
| PREAMP | | | |
| POWER AMPS | | | |
| TURNTABLE | | | |
| TONEARM | | | |
| CARTRIDGE | | | |
| CD PLAYER | | | |
| TAPE 1 | | | |
| TAPE 2 | | | |
| TUNER | | | |
| INTERCONNECTS | | | |
| SPEAKER CABLES | | | |
| SUBWOOFER | | | |
| SPEAKER STANDS | | | |

# PRODUCT INTRODUCTION PROFILE

**1. WHERE DID YOU FIRST FIND OUT ABOUT THIS WILSON LOUDSPEAKER?**

A. MAGAZINE ☐ WHICH ONE? _____

B. DEALER ☐ WHICH ONE? _____

C. FRIEND ☐

D. OTHER ☐ _____

**2. WHERE DID YOU FIRST ACTUALLY HEAR THIS WILSON LOUDSPEAKER?**

A. DEALER ☐

B. FRIEND ☐

C. SHOW ☐

D. OTHER ☐ _____

**3. PLEASE RATE THE IMPORTANCE TO YOU, OF THE FOLLOWING FACTORS**

| | | | | | |
|---|---|---|---|---|---|
| COMPONENT FACTORS | | | | | |
| A. SOUND QUALITY | 1 | 2 | 3 | 4 | 5 |
| B. APPEARANCE | 1 | 2 | 3 | 4 | 5 |
| C. SIZE | 1 | 2 | 3 | 4 | 5 |
| D. CONSTRUCTION QUALITY | 1 | 2 | 3 | 4 | 5 |
| DEALER FACTORS - PLEASE RATE YOUR DEALER | | | | | |
| A. SENSITIVITY TO YOUR NEEDS | 1 | 2 | 3 | 4 | 5 |
| B. STORE LOCATION-CONVENIENCE | 1 | 2 | 3 | 4 | 5 |
| C. QUALITY OF DISPLAY FACILITY | 1 | 2 | 3 | 4 | 5 |
| D. SPEAKER SOUND IN SHOWROOM | 1 | 2 | 3 | 4 | 5 |
| CREDIBILITY FACTORS | | | | | |
| A. RECOMMENDATION OF | | | | | |
| DEALER | 1 | 2 | 3 | 4 | 5 |
| FRIEND | 1 | 2 | 3 | 4 | 5 |
| MAGAZINE | 1 | 2 | 3 | 4 | 5 |
| B. WILSON AUDIO REPUTATION | 1 | 2 | 3 | 4 | 5 |

# EQUIPMENT USAGE PROFILE

**1. SIZE OF ROOM WHERE THE WILSON SPEAKER(S) ARE LOCATED**

| | | |
|---|---|---|
| A. ☐ | SMALL | LESS THAN 12 FEET BY 12 FEET |
| B. ☐ | MEDIUM | GREATER THAN 12 FEET BY 12 FEET AND LESS THAN 20 FEET BY 20 FEET |
| C. ☐ | LARGE | GREATER THAN 20 FEET BY 20 FEET |

**2. HOW WOULD YOU DESCRIBE THE ROOM**

A. ☐ DEN OR STUDY

B. ☐ FAMILY ROOM

C. ☐ BEDROOM

D. ☐ FORMAL LIVING ROOM

E. ☐ OTHER, PLEASE SPECIFY_____

**3. ARE THESE WILSON SPEAKERS USED IN A VIDEO SYSTEM?** ☐ YES ☐ NO

**4. WHAT TYPE OF SPEAKERS DID YOUR WILSON AUDIO LOUDSPEAKERS REPLACE?** _____

**5. HISTORICALLY, WHAT OTHER SPEAKERS HAVE YOU ENJOYED?**

_____