

SPECIFICATIONS

DISCUSSION

IT IS IMPOSSIBLE TODAY TO DETERMINE SOUND QUALITY OF SPEAKERS FROM SPECIFICATIONS. THE FLAWS IN SPEAKERS WHICH LIMIT CLARITY OR CAUSE LISTENING FATIGUE DO NOT SHOW UP IN SPECIFICATIONS OR IN MOST CASES EVEN IN ELABORATE ACOUSTIC MEASUREMENTS.

MY DESIGNS ARE BASED ON DECADES OF LEARNING WHAT GOES WRONG WITH SPEAKERS THAT CORRELATES WITH UNPLEASANT LISTENING EXPERIENCE AND TO AVOID THOSE PROBLEMS.

FROM A POSITIVE POINT OF VIEW, IT IS IMPORTANT TO REPRODUCE THE ENTIRE RANGE OF WHAT HUMAN HEARING IS CAPABLE AND TO PRODUCE THAT UNIFORMLY IN THREE DIMENSIONAL SPACE. FOR WHAT IT IS WORTH, I DO INCLUDE A SET OF SPECIFICATIONS.

I N T A N G I B L E S

DISPERSION

SOUND NORMALLY SPREADS IN THREE DIMENSIONS, AT ALL FREQUENCIES. THEREFORE, SO DOES OUR SPEAKER, UNLIKE MANY OTHERS.

RINGING

SPEAKERS SHOULD NOT SOUND LIKE A BELL; HENCE, THE WOOFER MAGNET IS ENCAPSULATED, DAMPING MATERIAL IS INSIDE THE CABINET, THE TWEETER COIL IS DAMPED BY A MAGNETIC LIQUID, CABINET WALLS ARE THICK AND BRACED, EDGES OF THE CABINET ARE ROUNDED.

PHASE RESPONSE

AS A FUNCTION OF FREQUENCY, THE RATE OF CHANGE IS MINIMIZED THROUGH CAREFUL CONTROL OF REACTIVE COMPONENTS IN THE CROSSOVER, WOOFER, TWEETER AND CABINET.

ROOM ACOUSTICS

THE SPEAKER IS DESIGNED TO SLIDE THE SOUND SMOOTHLY INTO THE ROOM FROM ITS ASSIGNED POSITION, WITHOUT CAUSING RESONANCES OR INTERFERENCES.

C O N V E N T I O N A L

FREQUENCY RESPONSE

40HZ TO 10,000 Hz \pm 2 dB
30 HZ TO 17,000 Hz \pm 4 dB
20 HZ TO 20,000 Hz \pm 6 dB

DIMENSIONS:

13 1/2" WIDE; 9" DEEP; 22" AT FRONT, 25" AT REAR

POWER MAXIMUM: 50 WATTS CONTINUOUS

POWER RECOMMENDED: 200 WATTS RECOMMENDED FOR HANDLING

TRANSIENTS

RATED IMPEDANCE: 6 OHMS

MINIMUM IMPEDANCE: 4 OHMS

CROSSOVER

THE WOOFER IS DESIGNED MECHANICALLY AND ELECTRICALLY TO ROLL OFF NATURALLY, NO ADDITIONAL FILTERING IS NECESSARY FROM THE CROSSOVER. A TWO POLE NETWORK ADDS TO THE NATURAL ROLLOFF OF THE TWEETER, ADDITIONAL COMPONENTS EQUALIZE THE TWEETER RESPONSE TO ACHIEVE MAXIMUM FLATNESS IN THE PRESCRIBED ROOM LOCATION.

FREQUENCY: 1600HZ, WOOFER SLOPE: 24 DB/OCTAVE, TWEETER

SLOPE: 24BD/OCTAVE

DRIVER COMPLEMENT

WOOFER: 6.5" WITH \pm " LINEAR TRAVEL

TWEETER: 1" SOFT DOME TYPE WITH MAGNETIC COOLING

FLUID

SHIPPING WEIGHT: 30 LB.



QUALITY LOUDSPEAKERS
SOLD DIRECTLY TO THE PUBLIC

594 SAGAMORE AVENUE, PORTSMOUTH, NEW HAMPSHIRE 03801
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THE LISTENING EXPERIENCE

JUST HEAR IT....

A circular logo with a dark background and white text. The text reads "DIRECT ACOUSTICS INCORPORATED" in a bold, sans-serif font, arranged in three lines.

DIRECT
ACOUSTICS
INCORPORATED

SPEAKER SILENCE

THE MISSION OF "SILENT SPEAKERS" IS TO ELIMINATE BARRIERS BETWEEN YOU AND TRULY REALISTIC SOUND. THE CONCEPT OF "SILENCE" IS BASED ON THE PREMISE THAT SPEAKERS CAN MAKE SOUNDS THAT ARE NOT ON THE RECORDING. THESE SOUNDS INCLUDE ALL FORMS OF DISTORTION, IRREGULARITIES IN FREQUENCY RESPONSE AS WELL AS RESONANCES CREATED WITHIN THE SPEAKER AND ACOUSTIC DISTORTIONS IN THE RADIATION OF SOUND FROM THE CABINET. WHEN ALL OF THESE SOUNDS ARE ELIMINATED, THE PRESENCE OF THE SPEAKER DISAPPEARS.

They are called "Silent Speakers" because their sound is so life like that you cannot tell that you are listening to speakers.

WOOFER

FOR DEEP BASS, THE WOOFER IS DESIGNED WITH A LONG VOICE COIL AND A SOFT SUSPENSION. IT IS RELATIVELY SMALL IN DIAMETER, IN ORDER TO PROVIDE GOOD DISPERSION AT THE CROSSOVER FREQUENCY TO THE TWEETER.

CROSSOVER

THE CROSSOVER DIVIDES LOW FREQUENCIES FROM HIGH FREQUENCIES WITH STEEP ATTENUATION AND COMPLIMENTARY SLOPES, IN ORDER TO PROVIDE A SEAMLESS TRANSITION BETWEEN THE DRIVERS.

TWEETER

THE TWEETER IS OF THE SOFT DOME STYLE. IT USES A EUROPEAN DESIGN AND INCLUDES MAGNETIC COOLING FLUID FOR THE VOICE COIL.

DRIVERS

THE LOW AND HIGH FREQUENCY UNITS ARE DESIGNED TO COMPLIMENT EACH OTHER AND THE CABINET. THEY PRODUCE WIDE FREQUENCY RESPONSE WITHOUT RESONANCES OR DISTORTION IN A UNIFORM THREE DIMENSIONAL PATTERN.

ROOM ACOUSTICS

"SILENT SPEAKERS" ARE DESIGNED FOR SPECIFIC ROOM PLACEMENT, FOR EXAMPLE, AGAINST A WALL AND SITTING ON THE FLOOR. DRIVE UNITS ARE ON A SLANTING BAFFLE, FACING UP, IN ORDER TO HELP AVOID CREATING STANDING WAVES AND ROOM ACOUSTICS.

BASS ENHANCEMENT

THE COMPLEX INTERNAL CABINET CHAMBERS EXTRACT THE BASS FREQUENCIES FROM THE LOW FREQUENCY DRIVER AND FEED THEM OUT THROUGH A SLOT IN THE BOTTOM OF THE CABINET. LOW FREQUENCY PERFORMANCE IS GREATLY EXTENDED WITH MINIMUM TURBULENCE.

GRILLE

THE GRILLE IS SHAPED PRECISELY IN ORDER TO BECOME PART OF THE BAFFLING OF THE DRIVERS.

CABINET

THE CABINET IS CONSTRUCTED OF HEAVY NON-POROUS WOODEN MATERIAL COMMONLY CALLED "MDF". IT IS INTERNALLY BRACED TO PREVENT VIBRATION OR INTERNAL RESONANCES.



I HAVE BEEN
DESIGNING
INNOVATIVE
WORLD-
CLASS

SPEAKERS FOR A
VARIETY OF
COMPANIES FOR
OVER THIRTY YEARS.
THIS LATEST DESIGN
USES A DRAMATIC
BREAKTHROUGH IN
DEEP BASS
REPRODUCTION AND
USES ALL THE
REFINEMENTS I KNOW
OF TO MAKE THE
TONAL SOUND
REPRODUCTION
NATURAL AND
PLEASING. THIS
INCLUDES DESIGNING
THE CABINETS TO
BLEND SMOOTHLY
INTO THE ROOM
ACOUSTICS.

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