# Mach Two ${ }^{\text {M }}$ <br> OILED WALNUT VENEER <br> SPEAKER SYSTEM 

CAT. NO. 40-4032A


Your Mach Two uses a special new ferrofluid-cooled design. Ferrofluid is a magnetic fluid originally developed for U.S. space program. The result is improved power handling and smoother, more linear response. Ferrofluid conducts heat build-up away from the critical voice coil and 'sinks' it into the speaker structure. This heat-sink effect makes it possible for the Mach Two to handle higher peak levels of power without burnout or distortion. The 15" (38 cm) high-compliance woofer speaker faithfully reproduces rich bass from 25 to 800 Hz . The 5" cone midrange speaker gives exceptionally smooth response from 800 to $6,000 \mathrm{~Hz}$.
The Mach Two is designed with a special dual radial super horn tweeter for remarkable response up to $40,000 \mathrm{~Hz}$ ! Its wide dispersion characteristics provide superb imaging and add lifelike presense throughout the listening area.
A deluxe inductive/capacitive crossover network achieves precise blending of the response characteristics of these speaker elements, producing a smooth, seamless response throughout the entire frequency range. The acoustical-mechanical design of the enclosure, and cone midrange speaker, and dual radial horn tweeter, results in unusually uniform dispersion. Incorporation of two controls, MIDRANGE and HIGH FREQUENCY, permit you to adjust speaker performance to the conditions in the listening area and to your own personal taste.

## SPECIFICATIONS

| Frequency Response : | $25-40,000 \mathrm{~Hz}$ |
| ---: | :--- |
| Power Handling Capacity | $: 160 \mathrm{watts}$ |
| Impedance $:$ | 8 ohms |
| Speaker Complement $:$ | $15^{\prime \prime}(38.1 \mathrm{~cm})$ high-compliance woofer, |
|  | $5^{\prime \prime}(12.7 \mathrm{~cm})$ midrange for more lifelike sound. |
|  | Advanced design dual radial super horn with ultra- |
|  | wide frequency range for exceptionally detailed highs. |
| Enclosure :Tuned port design for extended bass response, <br>  <br> removable grille. |  |
| Controls :Midrange and High Frequency level controls  <br> Dimensions : $28-3 / 8^{\prime \prime} \times 17-5 / 16^{\prime \prime} \times 12-7 / 32^{\prime \prime} \mathrm{HWD}$ <br>  $(720 \times 440 \times 310 \mathrm{~mm}$ HWD $)$ |  |
| Shipping weight : $46.2 \mathrm{lbs} .(21 \mathrm{~kg})$ |  |

Your MACH-TWO is a high-quality, three-way speaker system. The speaker elements and electronic components are manufactured and assembled under strict specifications to assure quality and consistency..
The tweeter and midrange controls let you customize the sound to your room and personal taste. (Bass response will be affected by the placement of the speakers.)
The speaker cabinet is made of fine, furniture grade particle board and genuine walnut veneers.
The decorative grille is acoustically transparent to give you brilliant highs.

## CONNECTIONS

The MACH-TWO is equipped with easy-to-connect spring-loaded push terminals. Simply remove $1 / 4$ to $1 / 2^{\prime \prime}$ of insulation from the end of the wire, press the terminal tab, insert the bare wire, and release the tab.
The size (gauge) of the wire you should use to connect your speakers depends on the distance between the amplifier/receiver and the speakers. For distances under 50' ( 15 m ), we recommend 18 -gauge wire - for distance over 50 ', 16 -gauge. Always use the minimum length of wire necessary to complete the connections.
Your local Radio Shack has a large selection of speaker wire.

## PHASING

Proper "phasing" is important when connecting the speakers. Phasing means that the + terminals on the speakers must be connected to the + terminals on your amplifier/ receiver (and - to -, of course).
Speaker wire has a mark on its conductors to help you with phasing. This mark may be a ridge or colored stripe along the insulation of one conductor. Or the insulation might be clear and the actual wires will be two different colors (silver and copper).
In any case, connect the marked wire between + on the amplifier receiver and + on the speaker; then connect the unmarked wire between - and -, as shown below.
Improper phasing will diminish the performance of your speakers - especially the bass response.


Right
Speaker Terminal

Amplifier/Receiver
Speaker Terminal

Left
Speaker Terminal

## SPEAKER PLACEMENT

The position of the speakers has a great effect on their bass response. Placing a speaker on a shelf or table or against a wall (position A) increases the bass slightly. In a corner or on the floor (position B or D) will increase the bass more. For maximum bass response, place the speaker on the floor and in a corner (position C).


With stereo systems, the distance between the two speakers is important, too. Too great a distance causes a "hole" in the middle of the sound; too small a distance decreases stereo effect. For best results, the distance between the speakers should be about two-thirds of the distance between the speakers and the main listening area.
If the speakers must be further apart, turning them in slightly might produce a better effect. A little experimenting will soon reveal the best set-up for your room and system.

## PROTECTING YOUR INVESTMENT

The speaker cabinet and grille require periodic maintenance for optimum appearance and performance. Treat the enclosure as you would any fine piece of furniture. Don't place objects on top of the enclosure - this might mar the finish. To protect and enhance the finish, we recommend using a high quality furniture polish.
Periodically clean the grille assemblies using a feather duster to remove accumulated dust. Do not use a vacuum cleaner on the grille unless you remove it from the cabinet first. The grille can be removed by grasping the corners and gently pulling it out. Never vacuum the actual speaker elements - use a feather duster, gently and sparingly.


125 Hz
1 kHz
8 kHz ———

## RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 5 years from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply bring your Radio Shack sales slip as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage
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