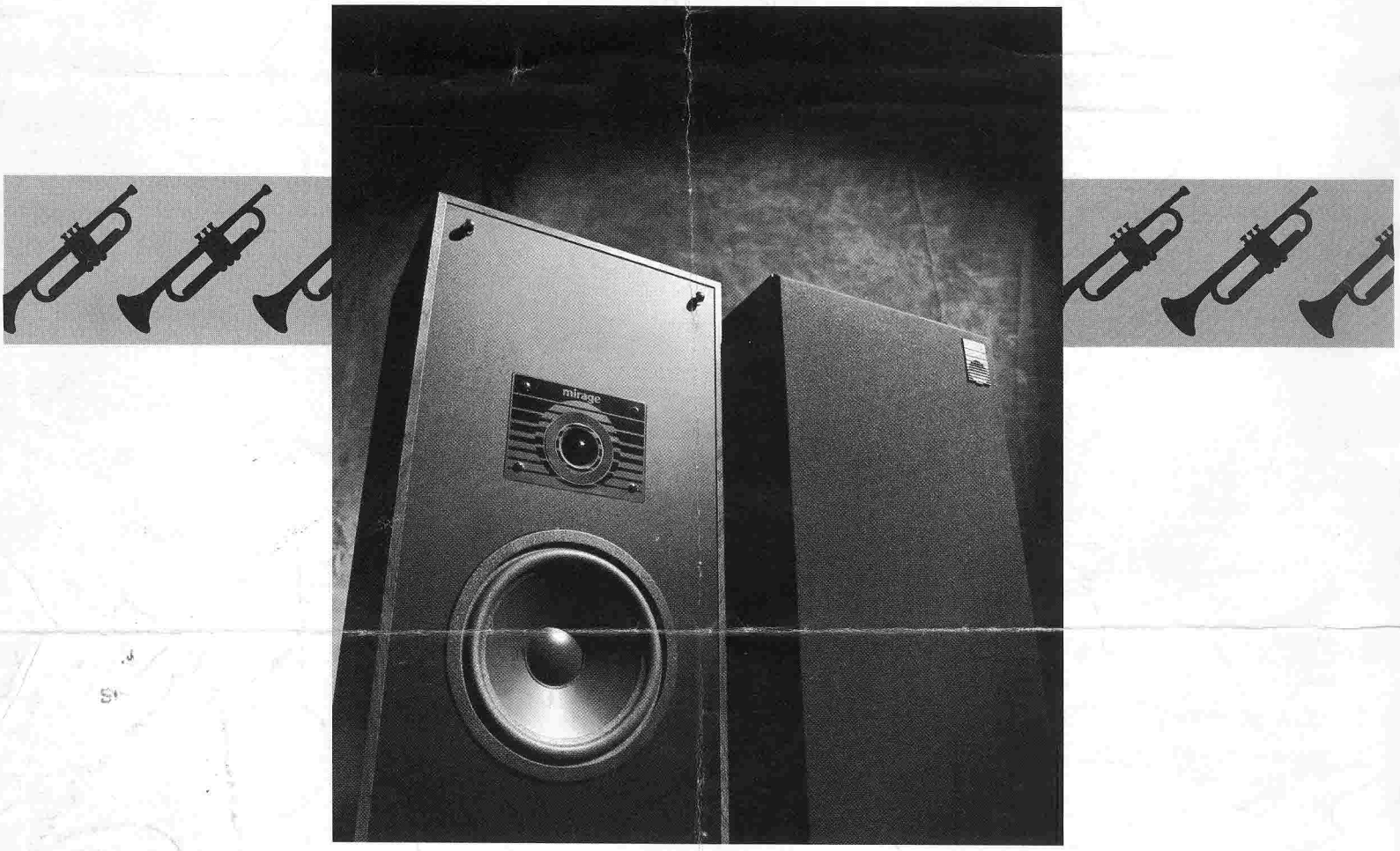
MIRAGE® 450



There are a lot of speakers that jump off the shelf and grab you by the ears. And there are a great many people who seem to enjoy that kind of abuse. However, there are also those of us who would rather listen to a live concert than a loudspeaker.

Which is what inspired us to build the Mirage® 450.

SEE THE MUSIC®

Mirage® Soft-Dome Tweeter.

It wasn't simply because of our dislike of pushy speakers, though. It was also because of something we could hear at a live concert, but not at home.

When you close your eyes during a live concert, you instantly form a distinct sonic image of each musician's location in space.

Yet if you listen to a recording of that same concert at home, that image disappears.

That is not necessarily the fault of the recording or the electronics. The blame usually lies with the speaker. (Or to be more precise, with the design of the speaker.)

Most speakers are designed to reproduce the full range of audible frequencies.

Unfortunately, the reproduction of music is a good deal more complicated than that.

THE TRICKY PART OF REPRODUCTION.

We've found (don't ask how) that in order for a speaker to be able to recreate an accurate image, it has to be able to produce a full range of frequencies that arrive at your ears, all at precisely the same moment in time, all in phase with each other, all at the same amplitude, with a minimum of diffraction.

Which is not an easy thing to do.

A CROSSOVER CAN DOUBLE-CROSS YOU.

In the past everyone has been forced to compromise between the pros and cons of different crossover types. A 'first order' network rolls off gradually, preserving the time and phase relationships that tell us the size and position of musical instruments. Second, third, and fourth order crossovers sharply limit the amount of low frequency signal (bass) that a tweeter must contend with, which protects the speaker and increases power handling. Unfortunately it degrades the imaging. We want Mirage speakers to be both strong *and* sensitive, so the Multi Time-Constant™ Crossover in the Mirage 450 carefully overlaps two different networks. The highs and lows are delicately blended where the woofer and tweeter meet, and then each is cut off where it would produce distortion or speaker failure. So you get wonderful imaging *and* high power handling.

The end result of this engineering exercise is that the Mirage 450 is delicate enough to reveal the inner detail of a symphony orchestra, yet is sturdy enough to reproduce a rock concert in your living room. And meet the challenges of today's digital recordings.

Of course, a crossover is only as good as the speakers it's connected to.

So the Mirage 450 uses unusual drivers.

For the diaphragm of our new tweeter, the 1" Mirage Soft-Dome, we developed a new material which is incredibly "quiet" and non-resonant. Which reduces distortion. And we surround our domes with a foam barrier that keeps stray highs from bouncing off the cabinet edges and confusing your ears.

Also, the tweeter is ferro-fluid cooled. So it can play the hottest music without getting overheated. And when you're entertaining friends, you can turn it up without turning them off. (Which could be a good way to meet your neighbours.)

THE SPEAKER WON'T SPEAK FOR ITSELF.

The woofer, designed expressly for the 450, is made of filled polypropylene. Because unlike some less expensive materials we could mention, polypropylene is a dead material. (Meaning that it will not break up under duress, add its own interpretation to whatever it's supposed to be reproducing, or store energy and release it at inappropriate moments.) Behind the woofer is something else you'll probably never see: internal cross-bracing. It's responsible for something you won't hear from a 450: its cabinet.

SIT ON IT.

A lot of speakers have stands that were added to the speaker as an afterthought. The T-1 stand was a part of the original design concept.

It precisely positions the 450 so that the floor acts like an acoustical extension of the speaker, smoothly reinforcing the bass frequencies. Naturally. With no gaps. And no discolorations.

IT PASSES SIXTEEN TESTS. OR WE EAT THE SPEAKER.

After all the time and effort we've put into the 450, we are not about to have one let you down. So each 450 gets run through a computer-driven laboratory that tests the speaker at sixteen separate points. If it doesn't pass all sixteen tests, it doesn't pass through our doors.

Which is why we have the audacity to back the 450 with a 10 year limited warranty.

ONE LAST NOTE.

It has been our experience that a great many of the people who buy Mirage speakers are professional musicians.

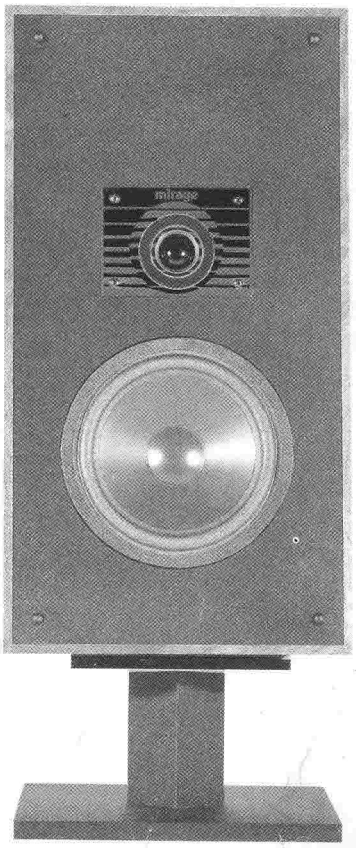
And while it could lead us to believe that people who live for music are in the best position to appreciate properly reproduced music, we suggest there is something else at play.

Musicians like to see live concerts, too.

H	(24 in.)	61.0 cm.
W	(12½ in.)	31.7 cm.
D	(9 in.)	22.9 cm.
Net	(25 lbs.)	11.3 kg.
Gross	(27 lbs.)	12.2 kg.

Stands shown are optional.

IMPEDANCE	8 ohms
SENSITIVITY	90 dB
CROSSOVER FREQUENCY	4 kHz
RECOMMENDED AMPLIFIER POWER RANGE	15-120 watts



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SEE THE MUSIC.™

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Printed in Canada