
INVESTOR'S BUSINESS DAILY

Tuesday, March 25, 1997

Computers Made Plain

How To Shop For Your Monster Television

BY TONI L. KAMINS

INVESTOR'S BUSINESS DAILY

The buzz these days among videophiles is home theaters. And the nucleus of any home theater is a television - one with a big screen.

But which big screen makes sense for you, given your budget?

Before shopping for a monster TV, you need to learn a little about how they work. Also, be forewarned: putting together a home theater means more than just buying a big TV. To get the movie experience at home, you need to consider lighting and viewing distance. Conventional TVs - the ones with the glass screens - are known in industry lingo as "direct-view TVs." In these sets the image appears directly on the screen rather than being reflected off a mirror. Direct-view TVs are available in screen sizes up to about 45 inches diagonally-measured.

Why do makers measure the screen diagonally? Pure marketing, say experts. It makes them seem bigger.

What's more, the diagonal size isn't even the viewing size. For example, a maker's claim of a 27-inch screen would be the measure of the glass diagonally. But the screen's bezel cuts down that 27-inch figure. And the "active area" of the screen - the part that can actually display images - would be even smaller.

What if 45 inches isn't enough? To go bigger, you'll have to investigate projection televisions.

The most important first step in buying a projection television is knowing whether or not it's suited to your viewing habits and environment. As you will see, they're not for everybody.

Projection televisions come in two basic types, rear-projection and front-projection. Prices for these sets usually

range from \$ 1,800 to \$ 6,000 - although theater-quality front-projection systems can cost \$ 50,000 and up.

Makers of these sets include Japanese firms Sony Corp., Toshiba Corp., Panasonic, a unit of Japan's Matsushita Electric Industrial Co. and Mitsubishi Electric Corp. Also selling the big projection sets are RCA, a unit of France's Thomson-CSF and Zenith Electronics Corp. of Glenview, Ill.

In a rear-projection set, three picture tubes, one each for red, blue and green, are at the core of the set. These tubes, hidden inside the television chassis, are aimed at a mirror that in turn reflects the light onto the back of the TV screen. Hence the term "rear-projection."

Although the picture is large, as big as 80 inches diagonally, it does not look sharp when viewed at close range. So the first thing you need to know about a rear-projection set is that you need a large room to get the maximum use out of it.

You'll need a distance of 10 feet or more between the screen and the viewer, says Joel Silver, founder of Boca Raton, Fla.-based Imaging Science Foundation Inc., a consulting firm to TV makers and broadcasters.

Also, unlike a direct-view TV, the picture from a rear-projection TV is not as bright and can wash out in a sunny room. So if you can't control the amount of sunlight coming into your viewing room this set is not for you.

With its bright lights, a showroom also may not be the best place to evaluate a projection TV. Silver recommends going to stores that have darkened viewing areas for their sets.

A front-projection TV consists of a screen and a separate projector. These systems offer the largest possible picture - as big as eight feet.

But Douglas Pratt, publisher of the

monthly Laser Disc Newsletter in New York, cautions big-TV buyers "not to be seduced by the largest picture in the showroom."

Most front-projection TVs must be set up and adjusted by a professional installer. And these systems are extremely light sensitive. Even small amounts of light can wash out the picture. So front-projection sets require a dark viewing room.

Resolution is the key to evaluating picture quality. Projection TVs offer better resolution than direct-view sets. All TVs display an image by writing lines across a screen. Projection TVs can write a continuous line left to right of each color the system displays, says Silver. So their image display is crisper than a direct-view TV, which can write only one color at a time.

But comparing the picture quality of different projection sets isn't easy. Display models often aren't adjusted properly. And one industry source that requested anonymity said: "All the manufacturers lie through their teeth about resolution."

What can you do? Silver says to ask the salesperson if the set you're considering comes with an option to adjust all settings to National Television Standards Committee recommendations. That way when you're viewing a broadcast you'll be able to compare two sets adjusted alike.

Other considerations: "Make sure the set you buy has at least three video input jacks" for the separate picture components, Silver said.

That's because you may want to upgrade other parts of your home theater. Newer style digital videodisc players are going to require three inputs as opposed to one, Silver says. This feature is called "component video" and will improve picture quality, he adds.