

Slim is In

Why do we want flat panel LCD/Plasma TVs?

Because we have enough of the good old bulky CRT TVs! CRT TVs also limit us in size – 34 inches (a phenomenal CRT wide screen from Pioneer some 15 years back) is about the biggest I can remember. And the bigger the screens are, the bulkier they become. CRT TVs are as deep as they are as wide, making them humungous boxes to have around.

That's exactly what makes flat screen TVs so desirable. There is no limit to how big the screen is but the depth, its slimmest, especially on the latest edge lit screens are now verging into another quantum of depth perception – typically less than 1.5 inches can be had (mounting hardware aside) . Slim has now become desirable and fashionable. The race is on – who's the thinnest?



Definitive Technology XTR-50

Apart from depth, there are some things CRT TVs can feature but you will never find in flat screen TVs – behind the big and chunky electron TV tube is tons of space for the imagination to work overtime. How does a built-in subwoofer (Toshiba, I think) sound to you (pardon the pun!)? It is not uncommon to find decent looking speakers in CRT TVs, even if they don't sound high end.

In flat screen TVs, the flatness of the TV chassis mandates an equally slim set of speakers. We all know good sounding speakers come in big ugly boxes – just like CRT TVs, so it goes to say the speakers they put inside flat panel TVs don't sound as good – electrostatics and Magneplanars aside, which need to be very large to achieve the sort of sound levels required – and the flatter they go, the worse they sound.

So the thinner our TVs become, the more we need external speakers. Unfortunately, the law of physics is again at play, flat speakers (eg. electrostatics and Magneplanars) that can be placed against the wall cannot be possible or even if it could, would sound just as bad as those speakers they used in ultra slim TVs. Or is it?

One of the first speaker manufacturers to challenge that notion is Definitive Technology and their latest flat screen companion is the Mythos XTR-50. This speaker is thinner than backlit LCDs and Plasmas and challenges the depth of edge lit LED LCD TVs. Designed to match the height of a 47" – 55" LCD TV, the XTR-50 boasts of 1.5 inch in depth when wall mounted! The speaker comes in a LCR configuration and is sold piecemeal – S\$1118 each. You would need three units for front left, center and right. The rear channels can be in wall, ceiling or even small bracket mounted satellites. Definitive Technology offers all three options so you can choose what best suits your setup.

The speakers are supplied with wall brackets which the speaker is hung - flushed over, leaving no trace of any sort of mounting hardware, very neat indeed! The drive units configuration is a tweeter flanked by two 3.5 inch mid-bass and another four 3.5 inch passive radiators – two on top and two below.

The midbass drive units are specially made for this speaker – it has an ultra shallow depth with an inverted outward dome shaped cone to aid dispersion as the drive units are sunk below the baffle. Do note this 'dome' is not the same as those dome midrange units from ATC or PMC; this is a small and compact midbass driver with the cone inverted out instead of inwards as most bass drivers. To reduce the depth of the speaker, the expensive neodymium magnets of the midbass drive units protrude through the back (though flushed) of the enclosure and sealed with a gasket. In effect the XTR-50 is a sealed enclosure. Speaking of the enclosure, it is a beautiful aluminum extrusion, not some cheap plastic molding. As a result the speaker has some respectable heft – weighing some 2.3 Kgs each. Definitive Technology makes use of the heat conductive gasket around the magnet to conduct heat away from the driver into the aluminum casing to aid cooling. This allows the speaker to play louder with lower distortion as the motor unit is adequately ventilated.

The four passive radiators look identical to the two driven midbass but come without a motor and are driven by passively by air pressure within the sealed enclosure – it helps the admittedly limited excursion of the small 3.5 inch midbass drive units to move a little more air as if it were a significantly larger drive unit – six cones at 3.5 inch each may move as much air as a typical 5 ¼ inch midbass drive unit. Definitive Technology claims the speaker is capable down to 93 Hz. This is an important aspect to take note – you would need to set the subwoofer crossover higher than the usual 80 Hz, anything from 100 - 150 Hz would be more appropriate, try and see what works best in your particular setup. Otherwise there will be an appreciable dip in the critical 80 – 100 Hz region. Wall mounting a speaker should be a straightforward affair, if you can mount an Ikea wall shelf, you can mount the XTR-50.



Where you would mount the XTR-50 is more important, try the speakers for a couple of days – move them apart or closer until you find the optimal balance. There will be a tendency for most people to mount them just beside the flat screen as in the video – it will be too close and the speakers will sound peaky – move them further apart until the response sound smoother and more linear. Typically that would be anything from at least 6 – 8 feet apart and even if it looks a tad silly, there is no getting away from the fact that is how you need to set up any loudspeaker and the XTR-50 is definitely not an exception to the rule. The center channel can be mounted above or below the screen. Oh, there is the tabletop stand option, but that's so uncool and entirely defeats the purpose, nay, existence of the XTR-50!

*Definitive Technology
in-wall/in-ceiling
UIW RS III surround speakers
makes a great match to the XTR-50*



The XTR-50 would come as a drastic shock when one moves from the flat screen internal speakers to this. There is no doubt the XTR-50 is a speaker proper – it plays loud and clean, detailed and snappy to listen to. The key to getting this performance is proper placement and crossover settings on your AV receiver. Having done so, the XTR-50 reveals its pedigree, the superb sonics from Definitive Technology. Fans of flat screen TVs can now have their cake and eat it as well. To better the XTR-50 would envisage full sized speakers. To me, the XTR embodies a balance - the essence of slim in terms of looks and performance in terms of sound quality. For that the XTR-50 earns high recommendations and would be a great success for its intended audience.