## <u>Usher CP 6311 Loudspeaker</u>

Manufacturer: Usher Audio Technology 67 Kai-Fong

Street Sec. 1, Taipei Taiwan

US Contact: Thee High End, 6923 Inwood Road, Dallas, TX 75209; 214/704-6082; www.theehighend.com

*Price*: \$2,195/pr

Source: Manufacturer Loan

Reviewer: Gary Lea

My cycling buddy Snug calls me the Ultimate Stuff Guy. He anointed me with this title almost 15 years ago. My two favorite passions, aside from wife and family, are bicycling and HiFi. For a great many of us our passions are fueled not just by the activity but also by a deep and sometimes disturbing fascination with the associated equipment.

The world of cycling is, interestingly, very similar to HiFi in this respect. Cyclists are constantly being barraged with new and better technology to make bikes lighter and faster. It is a pursuit of lighter weight measured in ounces and grams, and often at staggering

costs per gram. Rarely a month goes by without some new product made unobtanium and cantaffordium that sends our lust meters into overdrive.

I have, at times, been so sucked into the vortex that this technology rush creates that I forget about the main reason I love the

sport of cycling. In essence it is the activity of the ride. It is the challenge of going faster and further with each ride. It comes from the adrenaline surge created by suffering a wicked steep climb up a twisty canyon road and then the ensuing ear to ear grin that comes with the thrill of rocketing back down at insane speeds. It is those visceral sensations that stay in my mind and not the equipment all these years later! I speak of this because in many ways the same paradox applies to the world of the HiFi hobbyist.

This was driven home to me at CES when I saw the intense focus on equipment that fell into the unobtanium and cantaffordium categories. One company actually introduced a new set of mono block amps at a retail price in excess of \$300,000. Let's examine that for a moment, \$300k for amps!?

If my elementary understanding of math serves me correctly I should be able to buy a nice 2000 square foot house and two very nice automobiles for that kind of money in many cities in this great country of ours. I could also buy a fabulous \$50K dream audio system and have enough left over to attend roughly 4 outstanding concerts a month for two, with an average

ticket price of \$100 each, for the next 26 years. Given that kind of disposable income I would opt for the latter choice over spending it on two amps. That misses the point though. Very few of us have disposable income of modest levels let alone of gargantuan proportions. It begs the question - How much better is the sound from a \$300,000 amp versus a \$5,000 amp. My guess - Not so much! In a time when more and more people migrate away from the HiFi hobby the focus should be on bringing excellence to the masses through reasonably priced audio equipment. We should be getting equipment that gives us much of the ultimate sound quality experience at an affordable price. The good news is there are a few companies out there trying to do just that. This is what the Usher CP6311 is all about.

The CP6311 is a two-way ported design designed by Dr. Joseph D'Appolito and Usher President Lien-Shui Tsai. Dr. D'Appolito designs the crossovers and does the final voicing of the speaker. The remainder of the design work belongs to Mr. Tsai.

The CP6311 is a tall, slender, and attractive speaker

finished in a high gloss finish of piano black, metallic white, or silver and it's accented by real

wood panels on the sides and a matching wood tweeter surround. The driver array hosts a 1" tweeter mated to a 7 inch woofer in a cabinet that is tilted slightly backwards enhance sound dispersion and time phase coherency. The tweeter is mounted on top of the cabinet to avoid diffraction and to aid in a more natural sound according to Dr D'Appolito. The speaker is supplied with dual binding posts for bi wiring capabilities. The dimensions of the speaker cabinet without the decorative side panels, is

rate. I sat with Dr. D'Appolito at CES and talked for a considerable amount of time on his design work with Usher and the 6 series in particular. Of particular importance was the manufacture of the drivers utilized in the CP series.

43.5 inches tall by 9 inches wide by 12 inches deep.

The heavy metal base is 26 inches deep by 14" wide

and is supplied with some of the nicest spikes I have

seen in a while. With the base attached and spikes

installed the weight of each speaker is 86.9 pounds.

There is also a chamber in the bottom of each speaker

for additional mass loading with either sand or lead

shot. With the chamber filled the weight of each

speaker will easily top 100 pounds. The ever scientific

knuckle rap test proved the speakers to be very stout

indeed. The workmanship on these cabinets is first-



The drivers used in the CP6311 have been designed by Mr. Tsai and are manufactured by Usher. According to Dr. D'Appolito this particular model employs the Usher 8945W woofer. It is a very sophisticated, low-distortion design that consists of a cast aluminum frame and a carbon fiber filled paper cone. The woofer also utilizes a T-shaped pole piece with a copper shorting ring and a copper sleeve. It uses low-loss linear suspension with a large flat spider and a large half roll surround. This motor design yields a very low distortion at high SPLs. Two tone IMD at 90db SPL is rated below 0.01%.

The tweeter in this two way system is the Usher T9950. It is a low distortion model with a 28mm coated silk dome design. It also uses an aluminum voice coil and optimized pole piece geometry. There is a large rear chamber for low resonance and it utilizes light Ferro fluid damping. Two tone IMD at 90db SPL is rated at 0.02%

The crossover that Dr. D' Appolito specified for this unit is an acoustic fourth-order in-phase Linkwitz alignment at 2500Hz. The crossover uses very heavy gauge air core and quality film capacitors mounted on glass fiber reinforced circuit boards.

Dr. D'Appolito told me, "the two primary design goals were flat on-axis response and broad uniform

horizontal polar response. The first goal yields accurate first arrival information critical to imaging and the second goal assures a balanced reverberant field and broadens the sweet spot. This is required because we judge overall frequency balance psycho acoustically by fusing direct and reflected arrivals over a period of 5-30 milliseconds (the Haas fusion zone)."

What does this all mean in the listening room? Well when the speaker boxes arrived I unpacked them and wrestled them into my normal reference placement. The speakers were situated 37.5 inches from the side walls and 51 inches from the back wall. The placement had the speakers spaced 7.8 feet apart and 10.6 feet from the listener's ear. In my small listening room this seems to always be a good starting point. Initially I set the speakers up facing directly ahead with zero toe-in. It is in this position that I took the in room measurements with my trusty Radio Shack digital sound pressure meter. I measured frequency at 1 meter from the speakers utilizing a test CD.

Frequency response is stated by the manufacture at (-3db) 34 Hz to 28 kHz.

The in room response on the speakers was amazingly consistent from 20 kHz all the way down to 40Hz. There was a slight drop out between 125Hz and 80 Hz, and by slight I mean a 1-dB drop off. It was not noticeable in the listening tests but the measurements showed it. There was a 5-dB drop off at 31Hz. After that it became rather steep down to 20Hz.

First up on the Ushers was James Taylor's "Fire and Rain" (*Greatest Hits*, Warner 3113-2). The first thing that really stood out was the double bass. It became incredibly distinct and separate from the other instruments. This rarely happens in my system. On this track the soundstage seemed a bit restrained and not as wide as I have heard with other speakers but the detail was quite revealing. There is something very involving about James's voice on the right system. On the wrong system he can sound thin and reedy. At least to my ears. Not so through the 6311s! Smooth and with a weighty authority was the way he floated out of the Ushers.

On Acoustic Alchemy's "Little Laughter" (Radio Contact, Higher OctaveHOMCD84285) I focused in on the vocal performance. This is the first track by AA that features a singer taking center stage. Jo Harrop's vocals come across as smooth as sweet cream on this track but the stand out feature was the sound of Greg

Grainger's snare drum. On this particular track he employs brushes which can often make the annoying sound of static scratching on many recordings. Something I generally find aggravating on records, yet quite lovely in a live concert. Not so this time. They simply sounded delicate, just like they do live. This was indicative of things to come. I did notice that the placement of the singer was a bit vague and began to toe in the speakers to tighten up the center image. I moved in \_ inch increments and with the speakers toed in about 2 full inches from straight forward the center image snapped into place. I do mean "snapped" into place. It was as if I suddenly walked up and positioned Jo directly in front of the drums and 3 feet closer to my position, dead center in front of me. This is where the speakers stayed for the rest of the evaluation.

I decided to move to some music that was a bit livelier. I reached for the new Spyro Gyra album (The Deep End, Heads Up HUCD 3085). The song "Chippewa Street" has some great interplay play among guitar, horns, and drum solo snippets towards the end of the track. Great dynamic swings always test a speaker's mettle. Everything with this band is so tight and they always hand you some outstanding rhythm and pace that has been getting a great deal of play time on my system. I cued the track up and let 'er rip. The Ushers handled this track without the slightest bit of fluster. The shifts between the instruments were seamless and never seemed to ruffle the speakers. I have heard tracks like this become problematic for other, less capable speaker designs. One particular aspect of this speaker that impressed me was they way that I heard the cymbals decay. Having been a drummer for a time in a previous life, I became attuned to the sound of a cymbal's decay after having struck it. In many recordings and on many systems the decay sounds much shorter than it actually is. Not so with the Ushers. There was a definitive and realistic decay level that I have not heard from too many other speakers. The performance on this track became akin to being in a small club and listening to the band from about four rows back. I began to look around for the cocktail waitress to deliver my glass of wine!

The final test track of note that I will mention involves something that I am learning to appreciate more and more, classical music. I have always admitted that I have little knowledge of this genre of music and have never really cared for it. Perhaps it is age and wisdom, or at least age that has me venturing into this area with a bit more enthusiasm. I broke out a copy of Gustav Holst's *The Planets* performed by the Philharmonic Orchestra under the guidance and direction of John Elliot Gardner. (Gramophone's Choice 445 860-2). Let me just say that this particular recording moved me beyond what I am used to from

a classical piece. The first movement, "Mars, the Bringer of War" is so captivating and the Ushers presented this movement with authority and slam. It was easy to sit back and see the musicians playing their individual instruments as though you were actually at the concert. There are numerous times throughout the piece that the speakers are presented with sudden shifts to very low-level details. The 6311s never seemed to strain in the delivery but rather served up what was there like it was a five-star meal. It was all there with the trimmings and the exquisite ambiance.

Of course a speaker at this price range does not come without some imperfections and the Usher CP6311 is no exception. They are not the last word in plumbing the depths of the frequency spectrum. What they do provide is a delivered with consistency and impact. Tuneful bass is an over used description but it does apply. There is also the noticeable drop out at 20 kHz. I cannot hear it, but I can measure it.

What these speakers do provide is a very enjoyable experience with a good deal of detail resolution, strong ability to handle aggressive rhythm and pace, excellent sound staging, and a very fluid midrange. On top of that they are not made form unobtanium or cantaffordium. They can be a great ally in your quest to enjoy just about any type of music. On many different levels they offer you a look into that rarified air of the top echelon of HiFi without the nosebleed price. Wrap it all up in a great looking, well built package and you get a solid contender for anyone shopping for a speaker in this price range. In essence they can bring you back to the root reason we are all here together, the music! Congrats to Usher for listening last year to the cries in the wilderness and bringing these fine speakers to market. Go obtanium some and listen for yourself.

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