The Fremont
By Escalante Design

"My goal is not to build a speaker that is best suited only for low-output tube amps or high-powered solid-state amps, my goal is to build speakers that will always sound their best regardless of the amp. What's important is to get the listener close to the heart of the music."
Tierry Budge, Chief Designer, Escalante Design

Escalante is a very, very small town (inhabitants number less than 1000!), a scenic desert surrounds the town, deep in Utah, USA. Utah also happens to be the home of a very famous loudspeaker manufacturer - Wilson Audio, which is more than merely incidental to the beginnings of another up and coming loudspeaker manufacturer – Escalante Design.

Escalante Design is based in Provo, Utah. It is co-founded by Tierry Budge and Matt Waldron. Who? Budge started his speaker-building career more than two decades ago as Manager of Research and Development for Wilson Audio. While at Wilson, he was directly responsible for the WATT III, Puppy II, WHOW II, WAMM VI, and much of the groundwork for the original Grand Slam. He worked on the concept of the speaker itself, and designed all the drivers for the original model.

After Wilson Audio, Budge co-founded Talon Audio, but differences with his partners means they have to part ways and shortly after, Talon Audio stopped business. After he left Talon, a chance encounter with an acquaintance, Matt Waldron and the beginnings of a new loudspeaker company is in place. Matt is now the owner of the company, running the business side of things while leaving Budge to concentrate on what Budge does best – designing loudspeakers.

The Fremont is the largest and most ambitious design from this company thus far. It is the accumulation of all Budge has learned in Wilson Audio and Talon not to mention freelance work with many companies. Budge believes in specific driver designs and crossover circuits that pay attention to 'time'. Budge has no qualms about using off the shelf components but drivers designed to his specifications are the preferred option. On the cabinets, Budge concentrates on ways to

decrease cabinet resonance by as much as 30 dB. Clearly we are onto something special.

And it is. The Fremont is an ungainly speaker, a throwback to the speakers of the seventies like the old British monitors. However the gloss colours and aluminum accents do more than cosmetic – the aluminum adds damping to the cabinet. You'll need stands for the Fremont. For the asking price of USD15,000 for a pair of The Fremont, comes with a pair of matching stands.

The tweeter is the famous Scanspeak Revelator, damping foam is symmetrically placed around the faceplate to control diffractions. The Fremont is a twin woofer design. Huh? What twin woofer? There is only one visible 12-inch woofer, a paper cone with a corrugated fabric surround. The second woofer is, out of sight, housed within the cabinet. The woofer is fully designed and built by Escalante Design. You won't be able to find the driver with any other speaker save another Escalante. The cabinet is ported via two slots beside the tweeter. Surprisingly, the speaker does not come with biwiring option, though the Cardas binding posts are superb. With two twelve inchers and a massively built cabinet, its not surprising the Fremont are heavy at 46 Kgs each with the stands at another 25 Kg. You have the option of high gloss paint finish or Bamboo finish.

As mentioned, the Fremont is design to be driven with any amplifier. If your taste is single ended 8-watt per channel 300B, the Fremont will sing. If it is a 1000-watt monoblocs behemoth, the Fremont isn't going to sweat it. At 93dB sensitivity, an easy 8-ohm impedance Escalante claims anything from 1 watt to 1000 watts will drive the speaker satisfactory. We tried an 18-watt per channel 6C33 based tube amplifier, a 25-watt SET 845 tube amplifier and a pair of 100-watter solid-state monoblocs. My conclusion, the Fremont works very comfortably with each of the mentioned amplifiers. I am curious how would a 2A3 at 3 watts per channel sound? The claimed low frequency extension is 18 Hz. Wow.

The woofer design begs for some elaboration – the internal woofer only covers up to about 80Hz, the woofer on the outside takes it up to 500Hz. The special dustcap on the woofer apparently function much like a large dome midrange and radiates omni-directionally up to 3kHz. The tweeter is crossover at 2.5 kHz so there is a bit of overlap between the bass driver and the tweeter. The manufacturer recommends 200 hours of break-in. Looking at the woofer's surrounds, I would suggest more.

How the Fremont sound is more interesting. The presence of the twelve-inch drive units suggests an overly bass prominent balance. This is simply not true. What we have is a very full-bodied and rich balance, especially with the 6C33 tube; there is a strong palpable midrange presence with a quiet background and loads of inner detail. The bass end kept up very well with the midrange, never too slow. The highs were sweet and fluid sounding, not surprising given the inherent quality of the Scanspeak Revelator. The 18 watts of the 6C33 does show up in the slight lack of real weight that a higher-powered solid-state amplifier could give.

With a solid-state amplifier, the sound took on a more dynamic and punchier feel. However on the downside, it sounds courser and has a less fluid character. You can say it sounds drier and the magically midrange palpable presence of the 6C33 has become less obvious. Refinement took on one step back, not something I can listen to for long hours.

The 845 is quite a different sound altogether, it took on some of the positive aspects of the 6C33 and infuse it with a funkier feel. The music took on a more rhythmic pace. In terms of weight, the 845 scores best – despite the mere 25 watts output, it slam past the goal post of the 100 watter solid state amplifier. My only gripe, I miss the airiness and inner detail of the 6C33s.

One thing is clear; the Fremont does deliver the goods as promised. It is easily driven, it has musicality in spades, it has high levels of resolution, it plays loud (with little power), it has transparency and it goes wayyyy down deep. The speaker shows no preference for genre of music, it simply takes anything you throw at it. It reflects upon the partnering components and it hides nothing. The Fremont is a good investment, you have no real need for a really expensive amplifier to get it going and leave enough room for improvements should your budget allows you to trade your amplifier for a better one. The Fremont can only sound better as it gets along. The Fremont is one of the better speakers I have come across of late and though the asking price of USD15,000 is a lot of money, I can only suggest, it is money well spent. I believe in time to come, the Fremont will be a much highly sought after classic.

Specifications

- Direct Couple 2-way ported loudspeaker
- Frequency response: 18 Hz to 50 kHz
- Amplifier requirements: 1 – 1000 watts
- Sensitivity: 93 dB
- Impedance: 8 ohm nominal
- Dimensions: 73 x 36 x 46cm (HWD)
- Weight (each): 46 Kg

www.escalantedesigns.com

Direct Coupling -vs- The Typical Isobaric Design"

Patented here are an Electronic, Acoustical, and Mechanical network of sorts:
The Electronic network introduces a delay with two functions. 1) It introduces the appropriate delay between the two woofers so they operate in perfect signal alignment, and 2) it reduces the bandwidth being produced inside the cabinet by more than 3 octaves so that no midrange frequencies exit the port or reflect back through the external woofer.

There is also an engineered progressive Acoustical and Mechanical impedance (inverse to each other) that helps to control the woofers and introduces a precise delay so that the waves being produced by the internal woofer exit the cabinet (through the port) in phase with those being produced by the external woofer. This further extends the lows and makes the entire system more musically expressive.

The result of Direct Coupling is a response time at least 20x faster than other designs in any loading. Increased speed of this magnitude equates to an overall increase in musicality (i.e. image placement, dynamics, transparency, harmonic fill, timbre, soundstage, and air). Additionally, Direct Coupling extends the upper bandwidth by 2 full octaves and the lower bandwidth by 1 1/2 octaves (in comparison to sealed or ported alignments). A typical isobaric loading limits the upper bandwidth to 200Hz and only extends the lower by a 1/2 octave. Direct Coupling also increases power handling by 10 to 30 times of other loudspeakers while Isobaric will reduce power handling by 50% with all driver sizes.