ELECTRONICALLY REPRINTED FROM

**NINE CHANNELS OF FUN** Yamaha's RX-A2050 Does Atmos Right

# SOUND & VISION

Where Technology Becomes Entertainment™ ■ soundandvision.com **MAY** 2016

**TINY PROJECTOR, BIG VALUE:** The $850 Epson 2045 Overachieves

# SWEDISH CURVEBALL

## XTZ's Unique Cinema Series Is A Hit

**TWEAKED TO GO**

**PANASONIC'S 65-INCH TC-65CX400U**
ARRIVES HOME READY FOR ACTION

# The Swede Sound of Success

By Daniel Kumin

## XTZ Cinema M6 Speaker System

**PRICE $5,494 as reviewed**

**AT A GLANCE**

**Plus**

- **Very dynamically capable, with high power handling, high output**
- **Solidly integrated front stage**
- **Impressive subwoofer output and extension**
- **Flexible "tripole" surround speakers**

**Minus**

- **Slightly forward tonal balance (but perfect for behind-screen placement)**
- **Pricey**

**COMPLETE THE** SENTENCE WITH the most appropriate choice: "Yah, I sure do love those Swedish…"

A) meatballs.
B) supermodels.
C) interior designs.
D) loudspeakers.

If you chose D), congratulations, you're a winner! Because while Swedish loudspeakers may not be a household word, or available at IKEAs everywhere (yet), the examples before us here just might be a winner in your home theater.

XTZ defines itself as much pan-Scandinavian as Swedish per se, but the company's home base is in the blue-with-yellow-cross zone. The speakers themselves, like so many others today, are made in China, though XTZ points out that they employ high-quality drivers from fellow Scandinavian manufacturers such as SEAS and Scan-Speak, and the drivers are housed in unusually heavy, non-resonant cabinets. (XTZ offers a wide range of other speakers, as well as Dirac DSP and measurement systems, on its Website.)

### Design and Setup

The 5.1-channel suite we sampled, from XTZ's Cinema series, employs a single asymmetrical design across the front, though there are three distinct model names for left, right, and center. The cabinet face is angled in (for left and right), and up (for a horizontal center), but as far as I could tell, the Cinema M6 Left, Right, and Center speakers are otherwise identical and could be placed in any of the three positions, though the labels and logos would be inverted.

The design's most eye-catching feature is, obviously, the four tweeters. XTZ says this provides enhanced power handling, keeping distortion and dynamic compression low at even extreme levels, while permitting an unusually low crossover point. (You might expect such an array to suffer from considerable lobing at the top octaves—I certainly would expect it—but XTZ explains that three of the four tweeters are rolled off at mid-treble, leaving only one operating over the topmost octaves.) Otherwise, the M6 is a conventional woofer-tweeter(s)-woofer design, though quite solidly made. A casual look inside by removing a rear-panel connection block (itself featuring heavy multi-way jacks doubled up for biwirers) revealed thick, heavily braced MDF construction and a massive crossover board populated with high-quality components, including large air-core inductors. All six of our XTZ units were finished in a matte-black coating (presumably enamel or perhaps epoxy) that was meticulously even. Simple magnetic-mount black-knit grilles complete the utilitarian but quietly elegant look.

The Cinema S5 Dipole 3X surround-channels design is a "tripole" layout, with a conventional (albeit dual-tweeter) tweeter-under two-way on its face and opposing 3-inch drivers on its sides. Depending on which terminals you connect, the S5 can be deployed as a dipole surround (in which case, the two-way remains mute) or as a plain, front-firing speaker (with the opposed drivers unused) or in "dipole-3X" mode, where both dipole sides and direct-radiating front are simultaneously active. (M&K Sound, another Scandinavian speaker maker evolved from the original Californian M&K Sound, employs a similar surround-speaker scheme, and it's worth noting that Ken Kreisel, the "K" in the original M&K, now has a quad-tweeter array in his latest home theater offerings.)

I must confess, I've never fully taken the point of such tripole designs. The whole purpose of dipole surrounds is to create a mid-frequency null toward the listener's ears and a more diffuse, oft-reflected higher-frequency origin, for enhanced ambience and less-easily-localized effects. Having a direct-radiating source pointed at the ears would seem to completely defeat this purpose, resulting in a mostly bipolar pattern. Nevertheless, I initially left the S5s in this "3X" mode, as that's how they come out of the box, and it's how I suspect most purchasers will connect them.

XTZ's imposing SUB 1X12 is a large isosceles trapezoid equipped with a single 12-inch driver and, according to XTZ's specs, no less than 500 watts RMS (900 peak) of power courtesy of Claridy Class D modules. The sub's enclosure is vented via a single floor-level slot-shaped opening below the front-firing driver, while the control panel on the rear includes both balanced (XLR) and unbalanced connections.

Although the rear panels on the M6 and S5 are each peppered with M5 threaded inserts plus a keyhole slot, I initially placed the speakers in my usual spots: the left and right M6s on stands flanking my 52-inch Samsung and the S5s on high shelves astride the listening position. The center M6 lay on my usual low stand just below the TV's bottom edge, which left its angled face aimed just about perfectly toward seated ear level 9 feet away. The SUB 1X12 went in my long-established subwoofer location, outside of the front-right speaker about 4 feet from a corner.

### Distinctively Musical

After putting the speakers through about 10 days of casual use and break-in, I began as always with some full-range (no subwoofer) stereo listening to the left and right M6s alone. XTZ claims in-room response to 55 hertz, but a 75-Hz

● **The Cinema M6 operates horizontally as a center channel or vertically as a front left/right.**

● **The Cinema S5 Dipole 3X can operate in either standard dipole or "dipole 3X" mode using the front drivers.**

**RATING**

**XTZ Cinema M6 Speaker System**

**Performance** ★★★★½
**Build Quality** ★★★★½
**Value** ★★★½☆

**THE VERDICT**

**Reference performance** for movie playback, from some unusual speaker designs.

**XTZ CINEMA M6 SPEAKER SYSTEM**
**PRICE:** $5,494 (**M6**, $999 ea; **S5**, $699 ea; **SUB 1X12**, $1,099)
**XTZ** • xtzsound.us

anechoic –3-decibel point, which sounds about right. In my studio, the M6s delivered tight and well-metered bass that was enough (barely) for satisfying listening to typical pop or jazz, and most classical, but without the slightest hint of midbass "enhancement," bloat, or boom. That said, perceived response below about 60 Hz was decidedly modest, leaving quite a bit of musical heft on the table.

Since these speakers are clearly intended for subwoofer support, I wasted no further time and set up the SUB 1X12, itself a large part of the XTZ system's story. Or any other story: At 64 pounds and nearly 20 inches cubed, the XTZ sub isn't going to hide behind too many potted plants. I made room for it in my sub location and proceeded as usual. The XTZ's controls—continuously variable low-pass, phase, and level knobs, plus an EQ switch I'll get to—are conventional and produced the expected responses. Without a great deal of effort or fuss, I obtained swell results. The XTZ system was clearly designed as just that: a system. Sub/sat integration that was smooth, boom- and gap-free, and fully extended proved a cinch to dial in.

The Web description for the SUB 1X12 mentions the inclusion of a plug for the slot vent by which rolloff can be manipulated, but my sample (previously used, I assume) included no such bung, nor the user manual, which I found online. The Room Gain EQ switch, however, would prove to accomplish the desired manipulation of the response.

In 2.1-channel mode, the XTZ system proved a sharp and focused reproducer. Recordings such as Mahler's Symphony No. 1 (on an EMI CD) came across with impressive clarity and detail, and with ample (and seemingly bottomless) lower octaves that gave the most demanding passages their full measure of foundation. Vocals and midrange solo instruments such as clarinet and French horn were sharply etched and tightly imaged, and even the most complex musical textures sounded clear and gratifyingly easy to "listen into."

Tonally, the M6s are decidedly more forward than many other designs. Compared with my long-term (and long-discontinued) Energy Veritas stand-mounted speakers, they sounded noticeably brighter, and some low-midrange voices sounded a bit narrower—not nasal or honky per se, but distinctly different from what I hear on my everyday system. Yet I didn't find the XTZs to be harsh or aggressive. Their topmost few octaves were prominently open and almost sweet, giving super-treble-rich elements like crash cymbals and brass transients exciting impact and conviction. Whatever brightness I heard was more boon than bane—more like selecting a slightly different white balance, in picture terms, than hearing a loudspeaker coloration. That said, these are probably not the speakers for someone living in a glass (and thus highly reflective) house, nor for someone seeking to soften the attack of an early-years CD collection or low-bit-rate MP3s.

The stereo imaging of the left and right M6s was tight, but not very deep, as I would expect from an over-/under-woofer design, which tends to focus midrange and treble directivity toward the listener, as does the quad-tweeter array. In fact, off-axis timbre was audibly different at relatively small angles, both vertically and horizontally, at least on a pink-noise track—much more so vertically than horizontally, as is usual from such a layout. (These differences were substantially less obvious on music or speech, of course, but still discernible.)

Given the SUB 1X12's hulking presence, I couldn't resist cueing up a few favorite bass cows. The opening of Hall & Oates' classic "She's Gone" bloomed with 30-Hz deliciousness, while the finale of the Saint-Saëns Organ Symphony was in-the-hall awesome, and my few, in-the-name-of-science dub-step tracks indeed proved a dentist's best friend. This is where I put the sub's EQ switch into play; its Room Gain position was clearly a better choice in my room, keeping the XTZ sub's abundance of deep bass in better proportion.

## Hidden Treasures

It occurred to me that all this might be just what the doctor ordered for a behind-screen setup. And indeed, the M6s—with their sealed, port-less enclosures and generous wall-hanging options—are obviously designed with such a location in mind. So I lowered my acoustically transparent Seymour RM-80HD4K (I still get a thrill every time I go big-screen), behind which the 8-inch-deep (grille-less) speakers fit handily, and I fired up the projector for the movie-sound phase of my listening.

I'm not usually in favor of taking box speakers and wall-mounting them, but with a THX-standard 80-Hz crossover, the M6s sounded like they were made for it. The wall reinforcement seemed to warm up the midrange just that welcome tiny bit, while the Seymour screen helpfully knocked off just 1 or perhaps 2 decibels from the top octaves. The

● A floor-level slot is located below the SUB 1X12's woofer.

**RATING**

**XTZ SUB 1X12 Subwoofer**
Performance ★★★★★
Features ★★★★★
Build Quality ★★★★½
Value ★★★★☆

ON THE WEB **See soundandvisionmag.com** for full lab results and technical definitions


net result was a very impressive home theater presentation—all the more so because the front-stage speakers were now invisible.

Thus arrayed, the XTZ suite proved extremely able on my familiar rotation of audition movie scenes. All five channels were happy to absorb as much power as I had on offer—150 watts per speaker—without the least evidence of strain or dynamic compression. Dialogue was effortlessly audible and highly intelligible; I suspect that the M6s were voiced from the get-go with film sound in mind, where I find it desirable to have just a touch of emphasis in the presence region as well as tightly controlled directivity.

A recent Blu-ray arrival like *Mad Max: Fury Road* may set a new high-water mark for ridiculousness, but it served amply to show off the Swedish design's abilities. At all volumes, the film's largely guttural (or masked) dialogue remained understandable, and the front stage throughout the (interminably) long chase scenes held together solidly. (As an aside, the horizontal M6 made an acceptable match to the front left and right, but turning the center speaker vertical—and aiming it to compensate for the angled baffle—made a much better match and yielded improved horizontal dispersion for listeners seated off center. This worked fine behind the screen but is likely to be impractical in most glass-screen setups.)

Here, too, setting the SUB 1X12's EQ switch to Anechoic made *Fury Road*'s near-continuous low-bass rumblings too prominent and distracting. Toggling it to Room Gain kept the big woofer in scale with the system, at no perceptible sacrifice in deep bass. Which was effectively unlimited: Even at reference level in my substantial-volume studio, the XTZ sub had no problem presenting *Max*'s most impressive impacts and explosions (of which there are many) with full effect and nary a trace of limiting or overreach. (For those with bigger rooms or stronger constitutions, XTZ offers an incredible $2,499 subwoofer, the SUB 3X12, with three 12-inch drivers and three 500-watt amps in a single 170-pound, nearly 4-foot-high cabinet. Yikes!)

On the surround front, in their default "tripole" mode, the S5 pair performed similarly to good bipole surrounds, with an excellent spread and fairly non-localizable effects. In dipole hookup, they did what I find just about all decent dipoles do, which is what I prefer: present a more involving, less distracting ambience bubble at the cost of less focused and less tonally matched hard-panned effects. It's a shame that nobody makes a remote-controllable surround speaker that can be switched from dipole to bipole (or, if you will, "tripole") mode as your content dictates. (I concede the impracticality of making such a speaker, except perhaps in a powered design where electrical switching would be possible. Kickstarter, anyone?)

## Conclusion

While I've saved it for the end, I did notice that the XTZ setup is, at nearly $5,500, expensive. XTZ sells direct to consumer, though, and with a generous home-trial period, free return shipping, and the Cinema series' quality of componentry, construction, and performance, there's value here nonetheless.

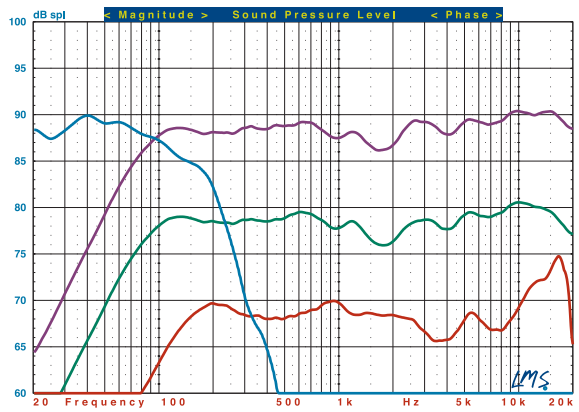
Cost aside, XTZ's Cinema is a very impressive home theater setup. I can't see recommending it for a music-first layout, but I doubt that most such system-builders would be interested anyway—though this Swedish layout is still a very able music reproducer. For a serious projection room install based on an acoustically transparent screen, a genre that tends to be fairly price-insensitive anyway, I think this system is just about ideal. ◆

● The Cinema M6 features an unusual driver array utilizing four tweeters.

**XTZ's Cinema is a very impressive home theater setup.**

# Test Bench

## XTZ Cinema M6 Speaker System




**M6 LEFT/CENTER (purple)** +1.40/–2.84 dB, 200 Hz to 10 kHz, –3 dB @ 80 Hz, –6 dB @ 63 Hz; impedance minimum 4.22 ohms @ 579 Hz, phase angle –63.98° @ 84 Hz; sensitivity 89 dB, 500 Hz to 2 kHz.

**M6 RIGHT/CENTER (green)** +0.56/–4.06 dB, 200 Hz to 10 kHz, –3 dB @ 80 Hz, –6 dB @ 63 Hz; impedance minimum 4.23 ohms @ 572 Hz, phase angle –64.46° @ 84 Hz; sensitivity 89 dB, 500 Hz to 2 kHz.

**S5 (red)** Three-face averaged response in "3X" mode: +0.93/–3.39 dB, 200 Hz to 10 kHz, –3 dB @ 121 Hz, –6 dB @ 98 Hz; impedance minimum 4.21 ohms @ 230 Hz, phase angle –48.58° @ 136 Hz; sensitivity 85 dB, 500 Hz to 2 kHz.

**X12 (blue)** Close-miked response, normalized to level @ 80 Hz: lower –3 dB @ 18 Hz, –6 dB @ 16 Hz, upper –3 dB @ 148 Hz with Low-Pass Filter switch set to Off and EQ switch set to Anechoic Room.—*MJP*

## SPECS

**Cinema M6:** 5.25 in treated paper-cone woofer (2), 1 in cloth-dome tweeter (4); 9.1 x 17.3 x 8.7 in (WxHxD); 19.8 lb • **Cinema S5:** 4 in treated paper-cone woofer, 1 in cloth-dome tweeter (2), 3 in cone lateral dipole driver (2); 8 x 11.1 x 8.8 in (WxHxD), 16.5 lb • **SUB 1X12:** 12 in paper-cone woofer; 500-watt RMS (900-watt peak) Claridy Class D amplifier; 20 x 17.7 x 18.7 in (WxHxD), 63.9 lb; XLR line input and passthrough output (XLR), RCA line input (2); IEC power-cord socket; continuously variable low-pass, phase, and level controls; volume, auto-on/off, room-gain EQ, and low-pass-defeat switches