**START BELIEVING** 

Sunfire<sub>\*</sub>

think that false beliefs, especially in audio, have given rise to some really wild designs. For example, \$25,000, 9 watt audio amplifiers - yes, you read that right, 9 watt. You will never find me designing such equipment- I simply do not believe in it. However, I love to read about such designs and I love to think and talk about them. I'm overjoyed there are people in this world who do design amplifiers like that. It's part of what makes audio so much fun!

Patent # 6,104,248:

Sunfire's Exclusive Tracking Downconverter™

Bob Carver

C.T.O.
Sunfire Corporation

## LUXURY IS NEVER OPTIONAL.

The 2007 Sunfire Product Line Represents Nothing Less Than An Audio Renaissance. What Has Long Been Recognized As A Stand Out Brand - Now Stands Alone - With A Range of Products That Are Better In Performance, Luxury and Style Than Anything That's Come Before Them. In Fact, With Every New Chapter of Sunfire, We Take The Word 'Benchmark' and Give It A Whole New Set of Rules. What Does That Mean For You? We Think It Means The Finest Home Entertainment Product You Can Buy Anywhere. Period.

THERE'S A LOT OF YOU IN EVERY SUNFIRE PRODUCT





### **Home Theater Preamp/Processor**





90º Fahrenheit

### If You Can't Stand The Heat...

Decades of research have led to Sunfire's latest cool-running Tracking Downconverter™ (TDC), amplifier design that produces the dynamic power required for movies and concerts but without wasteful heat that makes your system grow old before its time.

### **Amplifiers**



### B TGA-7400 / 7200

If an incredible 400W into each of its 7 channels sounds like music to your ears, meet Sunfire's premier home theater amplifier-the TGA-7400. Whether you're enjoying a string quartet or an action-thriller, the TGA-7400 delivers seemingly endless amounts of what you want most from an amplifier-power. For mid-sized applications with high-end expectations-the TGA-7200 provides a solution worthy of real consideration. Sharing much of its performance technology with the larger members of its family, the TGA-7200 delivers a stunning 200W into each of its 7 channels in a cabinet no larger than a typical stereo amplifier. Both products feature one of the smallest, coolest-running cabinets on the market today thanks to Sunfire's exclusive Tracking Downconverter™ technology.



### **G** TGA-5400 / 5200

The TGA-5400 gives you the power and performance of Sunfire's flagship TGA-7400 in a 5-channel configuration. This is a true, no-holds-barred amplifier featuring the incredible performance of five 400W amplifiers and Sunfire's exclusive Tracking Downconverter™ power supply. The TGA-5200 proves that the term 'entry level' is certainly a matter of context. Have you ever heard of an entry level amplifier with five, 200W amplifiers and premium Tracking Downconverter™ technology? That's more power and performance than most amps with far heavier price tags. A true, premium, high-performance product from Sunfire.



### **SZA-2200**

The SZA-2200 Digital Power Amplifier has been designed as the perfect complement to our award-winning home theater receivers and processors. Its cool-running design and slim form factor make it the ideal solution for second zone and whole-house applications. Two channels of clean, powerful audio can be loaded with multiple speakers to create a low-impedance, high power scenario; perfect for large rooms, outdoor speakers, or any situation where high volume is required.

All Models Available In Black And Platinum Except SZA-2200





START BELIEVING A 400 WATT, 8-INCH TALL SPEAKER IS NORMAL.

Have You Ever Experienced A Speaker That Thinks About The Physiology of Your Ear-Brain Processing System? A Speaker Whose Remarkable Cinema

Ribbon Technology Delivers
The Clarity and Output of a 6
Foot Tall Speaker–Yet Stands

about 8 Inches Tall? And Center Channel Speaker Shown
Whose Physical Beauty Comes From 7 Coats of
Ebonized Lacquer Applied To Its Rock-Solid Wood
Frame? Meet The Smallest, Most Powerful Speakers
In Their Class. The Sunfire Cinema Ribbon Series.

It's Sunfire
As You've
Never
Experienced
Before.



### START BELIEVING 1400 WATTS IS NORMAL.



Have You Ever Heard of A Receiver That Delivers An Incredible 1400 Watts of Cool Running Power? A Receiver Whose Exclusive TDC™ Technology Delivers

Sound With The Musicality of A Tube Amplifier Yet The Reliability And Durability of Solid State Design? Whose Advanced Features Include HDMI Switching, Sonic Holography, Dolby Digital EX, DTS-ES, Pro



Also Available in Black

Logic IIx, and Neo:6-Making It The Most Modern and Versatile Receiver You Can Buy. Meet The All-New-Sixth Generation - Sunfire Theater Grand Receiver.

UNCONVENTIONAL THINKING MAKES THE UNIMAGINABLE-POSSIBLE.



### **True Subwoofer Series**







The True Subwoofer Super Junior is another example of why you should never judge a book by its cover. At just 9″ tall, its 1500W internal amplifier puts out an unbelievable 108dB of the best sounding bass in the business. And, its small size also makes it the ideal solution for smaller home theater systems where multiple subwoofers are desired for smoother room response. Like its heftier siblings, the True Sub Super Junior features 5th- Generation High Back-emf technology and a Tracking Downconverter™ power supply, both Sunfire developed and both there to provide the highest output, coolest operation and most sensational experience possible.

True Subwoofer Super Junior

WHY OTHER COMPANIES HAVE FAILED

"There have been thousands of hours of engineering

coupled with just as much trial and error to create

Sunfire's True Subwoofers.
There have been many who

have tried to copy those designs, but most have reached the same dead end."

**Bob Carver** 

Sunfire Corporation

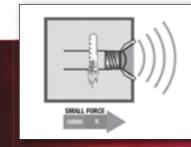
### A True Subwoofer EQ Signature

Don't let its diminutive 13" cubed profile fool you. The True Subwoofer EQ Signature will likely generate more earth-shaking and musical bass than any sub you've ever encountered. It's a true, flagship product with a massive 116dB of crystal clear output, delivered with the precision of Sunfire's two most coveted technologies. First is the 5th- Generation high-pressure, High Back-emf design, which produces extraordinary levels of bass energy from an impossibly small enclosure. The second is Bob Carver's patented Tracking Downconverter™ power source, used to supply its amazing, internal 2700-watt amplifier. Still want more? The True Sub EQ Signature gives you balanced inputs, a measurement microphone and internal contour circuitry that automatically optimize the True Subwoofer EQ Signature to your individual listening/viewing room. A true, one-of-a-kind product with absolutely no peer.

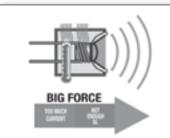
### B True Subwoofer EQ

An 11" cube that produces an incredible 110dB! The True Sub EQ−now in its 5th- Generation - is the subwoofer that started the Sunfire revolution. Thanks to Bob Carver's high-pressure, High Back-emf design and Tracking Downconverter™ power supply, the True Sub EQ is able to produce stunningly high levels of deep and musically accurate bass and maintain its amazing cool while doing it. What's more, the True Sub EQ's compact size makes it small enough to fit into practically any music or theater system you might be designing.

### Patent # 5,937,074: High Back-emf Technology



Let's face it large subwoofers are easy. These are the ones you've seen for years. There is lots of air in there, so it doesn't take much force (amplification) to compress it. Without much force, it doesn't take much current and therefore the voice coil remains cool. This is the low back-emf, low-current, low Bl subwoofer system that's been around for years.



Seemingly, the most obvious solution would be to shrink the size of the box. However, the increase in air compression requires more force, so this design would not work. So the next logical step would be to add more force by simply increasing the output power of the amplifier. Boosting the current and nothing else causes the voice coil to overheat. After a few seconds the voice coil would fail.



To pull this rabbit out of the Sunfire hat, we needed a very high Bl. To achieve this, a custom long-throw woofer (increased stroke), a specialized, tightly wound, small bore voice coil (increased "1"), and an enormous magnet (high "B") were used. The result is high power, but not destructively-high current via the Tracking Downconverter™ ampilfier.

# Sunfire

# NOW, WHEN YOU WANT TO LOOK AT THE FUTURE OF SUBWOOFERS -- YOU CAN.

### **Solitaire Series**



### True Subwoofer EQ Solitaire 12

The True Subwoofer Solitaire EQ 12 is the perfect choice when our twin 12″ sub just won't work for your design. The Solitaire 12 uses much of the technology found in the True Subwoofer EQ and EQ Signature. With its 13.5″ cabinet, it will easily integrate into custom cabinetry or stand alone, thanks to an elegant hand-rubbed, "piano black" lacquer finish. Utilizing a massive, built-in 1500W amp with Sunfire's exclusive Tracking Downconverter™ and High Back-emf technology, the Solitaire 12 will fill the largest of rooms with all the cool-running bass you'll ever want, all the way down to an unbelievable 18Hz!



# gy,

### **B** True Subwoofer EQ Solitaire 10

With its relatively small profile and stunning design, the True Subwoofer EQ Solitaire 10 is a true overachiever. How, you say? Well, first consider its 1250W internal amplifier with Tracking Downconverter™ technology for amazingly cool and reliable operation. Consider, too, its patented, 5th-Generation High Back-emf driver which creates massive amounts of bass from its diminutive 11.5″ cabinet. And, if that's still not enough, stare longingly at its gorgeous, hand-applied black lacquer finish that makes the Solitaire 10 too good looking to hide in a cabinet—although you certainly can thanks to its detachable grill and front firing driver.

### **D** - Series



### **C** D-12

Utilizing many of the patented and award-winning features of the True Subwoofer™ series, the D-12 packs more performance per square inch of cabinet than any other subwoofer in its class. The D-12 features an incredibly powerful 1000W amplifier with Tracking Downconverter™ technology as well as Sunfire's 5th- Generation High Back-emf that uses extremely large magnets and long-throw drivers to create tremendous amounts of quality bass from its modest 13″ cubed cabinet. More than a decade in the making, the D-12 has true Sunfire DNA throughout



### **D** D-10

Standing just 11.5" cubed, the D-10 is proof positive that great things do come in small packages. With its 1000W amplifier and Tracking Downconverter™ power supply, the D-10 can put out copious quantities of beautiful bass and do it with a finesse not found in subs twice its size. Add one to any existing home theater speaker system to feel the impact of digital soundtracks as you've never felt them before. Pair a D-Series subwoofer with a Sunfire amp or receiver for a true audiophile experience. Or, use a pair of D-10s in your system for flatter room response. The D-10 dates its lineage to the original small box, high power subs popularized by Sunfire more than a decade ago.



### **E** D-8

The Sunfire mantra of 'more sound / less box' reins supreme in the D-8. In fact, at just 9.75" cubed, it will kick up the bass performance more than subwoofers twice its size. The D-8 features Sunfire's High Back-emf technology that produces massive bass output utilizing extra large magnets and long-throw audiophile grade drivers. Plus, the D-8 houses Sunfire's patented Tracking Downconverter<sup>TM</sup> power amp for a cool and calm performance every time.



### **The Absolute Sound**

October 2006 — By Robert Harley

There's Hope for Our Youth After All

I was having dinner with Bob Carver in Austin, Texas, the other night when a funny thing happened. As you probably know, Bob Carver is the founder of Carver, and more recently, of Sunfire. What you might not know is that Bob Carver is one of the truly innovative thinkers in audio design. Many designers have created great-sounding circuits, but very few have invented entirely new circuit topologies (and loudspeaker concepts) from a clean sheet of paper.

Carver's innovations include the first high-powered solid-state amplifier (the 350Wpc Phase Linear 700 in 1972), the Auto-Correlator circuit, Sonic Holography, the Magnetic-Field Power Amplifier, and the Asymmetric Charge-Coupled Stereo Detector, a circuit for improving FM reception.

Anyway, back to my dinner story. The young waiter overheard us talking, and asked incredulously, "You're Bob Carver?" Bob modestly replied that he was. After dinner, another waiter, who must have been about 22 years old, approached the table and told Bob that his father owns a pair of Phase Linear 700s that he bought in 1972, and that he still listens to music on them to this day.

How gratifying it must be to know that something you created 34 years previously is still being enjoyed today-and to be recognized by a generation who wasn't even born when some of your creations were developed.

It was a wonderful moment.

