

## HIGH-PRESSURE SUBWOOFER

## TRUE SUBWOOFER EQ *signature*



Back panel of True Subwoofer EQ shown

Bob's design for a high-pressure, miniature sized subwoofer changed everything. With the Sunfire True Subwoofer, music and film enthusiasts could have real bass in a room that could never support a large, bulky, old-school subwoofer.

How do you improve on it? Add balanced inputs, a measurement microphone and internal contour circuitry that automatically optimizes the True Subwoofer EQ Signature to your individual listening/viewing room. The dimensions and physical volume of your room can affect bass, creating bumps and dips in frequency re-

sponse. Certain bass frequencies are over-accentuated; others are noticeably shy.

To match the True Subwoofer EQ Signature to your room, place the measurement mic in your listening chair and follow four simple instructions. Voila! It's optimized.

Needless to say, the True Subwoofer EQ Signature is our flagship model. At 13 inches cubed, it produces huge bass from a box a fraction of the size of its competitors.

Powered by a special internal Sunfire 2700-watt amplifier using Bob's patented Tracking Downconverter power supply technology, the Sunfire True Subwoofer EQ Signature simply has no equal.

- ▶ 2700-watt amp featuring patented Tracking Downconverter power supply
- ▶ Frequency response: 16 Hz to 100 Hz (+0, -3 dB)
- ▶ Measurement microphone and automatic internal contour compensation keeps it that way
- ▶ Greater than 116 dB peak SPL with room gain
- ▶ Input coupling is optical and accepts balanced, standard and high-level inputs
- ▶ Bore 10 inches – stroke 2.35 inches (over 360 cubic inches total air volume displacement)
- ▶ Crossover points variable from 30 Hz to 100 Hz
- ▶ Input level (volume) control
- ▶ Phase continuously adjustable 0° to 180°
- ▶ Passive 70 Hz 6 dB per octave hi-pass line level output for satellite loudspeakers
- ▶ Dimensions: 13" by 13" by 13"
- ▶ Two-year warranty



## HIGH-PRESSURE SUBWOOFER

## TRUE SUBWOOFER EQ

**“Never has there been a subwoofer that could pump out such prodigious deep bass at levels capable of rattling the contents of a house, from an enclosure smaller than a stack of LPs.”\***

AUDIOPHILE REVIEW



This is the subwoofer that started the revolution...in a dramatically upgraded form. At 11 inches cubed, the Sunfire True Subwoofer (now fifth generation with built-in equalization) re-defines the term “spouse friendly.” The True Subwoofer EQ is small enough to fit into practically any music or theater system to quickly add stunningly high levels of deep and musically accurate bass.

It's easy to set up because we gave it built-in diagnostics that automatically smoothes its output frequency contour to your unique listening room (see further explanation on the EQ Signature page).

The True Subwoofer EQ incorporates two of Bob Carver's inventions: First is the high-pressure, high-back-emf design which allows creation of incredible levels of bass energy from an impossibly small enclosure. Second is Bob's Tracking Downconverter power source used to supply the internal 2700-watt amplifier.

And now we've added a balanced input and made it “smart” by adding a measurement microphone and internal contour circuitry. When you add it all up, The True Subwoofer EQ has absolutely no performance equal its size.

- ▶ 2700-watt amp featuring patented Tracking Downconverter power supply
- ▶ Frequency response: 18 Hz to 100 Hz (+0, -3 dB)
- ▶ Greater than 110 dB peak SPL with room gain
- ▶ Measurement microphone and self-adjusting contour circuitry
- ▶ Input coupling is optical and accepts balanced, standard and high-level inputs
- ▶ Bore 8 inches – stroke 2.35 inches for a total air volume displacement of over 235 cubic inches
- ▶ Crossover points variable from 30 Hz to 100 Hz
- ▶ Input level (volume) control
- ▶ Phase continuously adjustable 0° to 180°
- ▶ Passive 70 Hz 6 dB per octave hi-pass line level output for satellite loudspeakers
- ▶ Dimensions: 11" by 11" by 11"
- ▶ Two-year warranty

\* quote refers to previous version without EQ feature, but it was too good to not include.



## HIGH-PRESSURE SUBWOOFER

"When you first see it, you won't believe it's capable of delivering significant bass. And when you first hear it, you'll search the room to see if someone has sneaked in two of them."

STEREO REVIEW'S SOUND AND VISION



## TRUE SUBWOOFER SUPER JUNIOR



Back panel of True Subwoofer Super Junior

We took a good thing and made it, well... *smaller*, both in size and price. The Sunfire True Subwoofer Super Junior fits any room and any budget. Using the same patented amplifier and speaker technology as its award winning big brothers, "Junior" packs serious bass into a tiny **nine**-inch cube.

It's perfect for entry-level systems coupled with A/V receivers or lower-priced A/V preamps. Many Sunfire dealers find the Super Junior woofer matches up very well with bookshelf loudspeakers as well as floor standing speakers.

The Super Junior's modest price and diminutive size also make it ideal in installations not suited for a single larger sub. Good placement of one woofer provides bass extension with even dispersion...two woofers guarantee it.

Connect a desktop PC with DVD drive and high resolution monitors to DSL (or faster connection) to the Internet and you have a direct pipeline into a vast storehouse of music and videos. Super Junior can add impact and detail to any desktop music system, as well as bringing thunderous realism to PC video games — while taking up a minimum of space.

- ▶ 1500-watt high-power, high-efficiency Tracking Downconverter power amplifier
- ▶ 22 to 100 Hz frequency response (+0, -3 dB)
- ▶ Greater than 108 dB peak SPL with room gain
- ▶ Long-throw Sunfire premium drivers
- ▶ Auto signal-sensing turn-on and stand-by mode
- ▶ Line level unbalanced inputs
- ▶ Speaker level binding post inputs
- ▶ Line level high-pass outputs
- ▶ Continuously variable phase control and crossover frequency adjustment
- ▶ Continuously variable volume level control
- ▶ Soft clipping circuit allows graceful overload and prevents speaker damage due to clipping
- ▶ Gold-plated inputs and outputs
- ▶ IEC-style detachable line cord (120V AC only)
- ▶ Dimensions: 9" by 9" by 9"
- ▶ Two-year warranty

HIGH-PRESSURE SUBWOOFER

## SOLITAIRE 12



For uncompromising but difficult applications where our twin driver subwoofers just won't do, Sunfire's True Subwoofer Solitaire 12 absolutely will. This design uses much of the technology found in the True Subwoofer EQ and EQ Signature (including measurement mic and automatic internal contour adjustment), yet fits well into custom cabinetry with its single front-firing driver and removable cloth grill cover — or stands alone thanks to an elegant hand-rubbed piano lacquer finish.

The Solitaire 12 uses a built-in 1500-watt amplifier that incorporates Bob Carver's Tracking Downconverter power supply

technology and can fill even the largest rooms with tremendous bass extended to an unbelievably low 18 Hz.

- ▶ 1500-watt Sunfire Tracking Downconverter amplifier
- ▶ 16 Hz to 100 Hz frequency response (+0, -3 dB)
- ▶ Greater than 113 dB peak SPL with room gain
- ▶ Sunfire self-optimizing room EQ system with measurement microphone and internal contour circuitry tailors the Solitaire 12 to your own listening/viewing room's shape and volume
- ▶ Optically coupled input accepts balanced, standard and high-level inputs
- ▶ Single front-firing driver with a displacement of well over 100 cubic inches (a typical 15-inch woofer travels only 1/2-inch for a mere 66 cubic inches of displacement). The Solitaire's 12" woofer moves over 50% more air!
- ▶ Removable front grill cover
- ▶ Input level (volume) control
- ▶ Phase continuously adjustable
- ▶ Variable low pass from 30 Hz to 100 Hz
- ▶ Passive 70 Hz hi-pass low-level outputs for satellite loudspeakers
- ▶ High-gloss black lacquer finish
- ▶ Dimensions: 13" by 13" by 13.9" deep
- ▶ Two-year warranty



HIGH-PRESSURE SUBWOOFER

## SOLITAIRE 10



What happens when Bob applies his dual-high-pressure woofer technology to a single-front-firing design? Deep, musically accurate bass to 16 Hz.

The True Subwoofer Solitaire 10 uses a 1250-watt Tracking Downconverter amplifier, and includes our new self-diagnostic system with measurement microphone and internal contour EQ adjustment.

Add a gorgeous black piano lacquer finish and you have a sub that's almost too good to hide in a cabinet (although you can thanks to the single front-firing woofer and detachable grille).

- ▶ 1250-watt Sunfire Tracking Downconverter amp
- ▶ 18 Hz to 100 Hz frequency response (+0, -3 dB)
- ▶ Greater than 107 dB peak SPL with room gain
- ▶ Self-diagnostic EQ system and measurement mic
- ▶ Optically coupled input accepts balanced, standard and high-level (speaker) inputs
- ▶ Single front-firing driver with removable front grill cover for in-cabinet mounting
- ▶ Input level (volume) control
- ▶ Phase continuously adjustable
- ▶ Variable low pass from 30 Hz to 100 Hz
- ▶ Passive 70 Hz hi-pass low-level outputs for satellite loudspeakers
- ▶ High-gloss black lacquer finish
- ▶ Dimensions: 11" by 11" by 11.9" inches deep
- ▶ Two-year warranty



# SPECIFICATIONS



## PREAMPLIFIER, TUNER/PREAMPLIFIER/PROCESSOR, RECEIVER

	Vacuum Tube Control Center	Theater Grand four	Ultimate Receiver
Line level inputs			
Line gain	12 dB	17 dB	17 dB
Line gain, Phono	52 dB MM 72 dB MC	57 dB	57 dB
Frequency response	±0.5dB 20Hz-20kHz	±0.5dB 20Hz-20kHz	±0.5dB 20Hz-20kHz
Distortion (THD)	< 0.5%	< 0.03%	< 0.03%
Tone controls, bass/treble	±10 dB	±10 dB	±10 dB
Video section			
Inputs / outputs	—	1 Vp-p	1 Vp-p
Component	—	100 MHz -1.5 dB	100 MHz -1.5 dB
Composite	—	6 MHz -2 dB	6 MHz -2 dB
S-Video	—	18 MHz -1.5dB	18 MHz -1.5dB
FM tuning section			
Range	—	87.5 to 108 MHz	87.5 to 108 MHz
Usable mono sensitivity	—	1.6 µ volts (75Ω) 15.2 dBf (75 kHz DEV. 30dB)	1.6 µ volts (75Ω) 15.2 dBf (75 kHz DEV. 30dB)
50dB quieting sensitivity (stereo)	—	31.6 µ volts (75Ω) 41.2 dBf	31.6 µ volts (75Ω) 41.2 dBf
Frequency response	—	30 Hz-15kHz +0.5dB / -3dB	30 Hz-15kHz +0.5dB / -3dB
AM tuner section			
AM range	—	530-1710 kHz	530-1750 kHz
Usable sensitivity (7)	—	16µV-600µV/m	16µV-600µV/m
Usable sensitivity (8)	—	48 dB	48 dB
Power section			
Output (each channel) (9)	—	—	200 W + 200 W
THD	—	—	< 0.05%
Sensitivity (200W output)	—	—	355 mV
Minimum impedance	—	—	4Ω average
Dimensions (H x W x D)	6.5" x 19" x 18"	5.75" x 17" x 16.5"	5.75" x 17" x 16.5"
Weight	25 lbs	24 lbs	32 lbs

(7) 30% modulation, S/N 20dB (8) 30% modulation, 1 mV input (9) 20Hz to 20kHz

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## STEREO, FIVE-CHANNEL AND SEVEN-CHANNEL POWER AMPLIFIERS

	300-two	600-two	Cinema Grand 200-five	Cinema Grand 400-five	Cinema Grand 200-seven	Cinema Grand 400-seven
Number of channels	2	2	5	5	7	7
Power output (1)	300 W	600 W	200 W	400 W	200 W	400 W
THD at rated power	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%
Power at clipping (2)	600 W 4Ω 1200 W 2Ω	1200 W 4Ω 2400 W 2Ω	400 W 4Ω 800 W 2Ω	800 W 4Ω 1600 W 2Ω	400 W 4Ω 800 W 2Ω	800 W 4Ω 1600 W 2Ω
Hum and Noise (3)	-115 dB	-118 dB	-115 dB	-118 dB	-115 dB	-118 dB
Max output current (4)	80 amps	100 amps	80 amps	120 amps	80 amps	120 amps
Max output voltage	49 Vrms	69.3 Vrms	40 Vrms	56.6 Vrms	40 Vrms	56.6 Vrms
Output impedance	0 Ω	0 Ω	0 Ω	0 Ω	0 Ω	0 Ω
voltage / current sources	1 Ω	1 Ω	1 Ω	1 Ω	1 Ω	1 Ω
Input impedances RCAs in	24 kΩ	24 kΩ	24 kΩ	24 kΩ	24 kΩ	24 kΩ
Input sensitivity	1.64 Vrms 0.82 Vrms	2.32 Vrms 1.16 Vrms	1.34 Vrms 0.67 Vrms	1.9 Vrms 0.95 Vrms	1.34 Vrms 0.67 Vrms	1.9 Vrms 0.95 Vrms
RCA unbalanced / balanced						
Input impedance XLRs in (5)	24 kΩ	24 kΩ	24 kΩ	24 kΩ	24 kΩ	24 kΩ
12VDC Trigger inputs	5-18 VDC 600Ω	5-18 VDC 600Ω	5-18 VDC 600Ω	5-18 VDC 600Ω	5-18 VDC 600Ω	5-18 VDC 600Ω
input voltage/ impedance						
Dimensions						
Height	5.9" incl. feet	5.9" incl. feet	5.9" incl. feet	5.9" incl. feet	5.9" incl. feet	5.9" incl. feet
Width	17" (6)	17" (6)	17"	17"	17"	17"
Depth	16.7"	16.7"	16.7"	16.7"	16.7"	16.7"
Weight	33 lbs	36 lbs	32 lbs	38 lbs	34 lbs	40 lbs

(1) continuous, per channel, all channels driven into eight ohms from 20Hz-20kHz (2) per channel, time limited basis  
(3) A-weighted (4) peak-to-peak per channel (5) each leg balanced to ground (6) ALSO AVAILABLE IN 19-INCH WIDTH

## ULTIMATE SUBWOOFERS

	True Subwoofer EQ Signature	True Subwoofer EQ	True Subwoofer Super Junior	True Subwoofer Solitaire 10	True Subwoofer Solitaire 12
Amplifier output	2700 W	2700 W	1500 W	1250 W	1500 W
High Cut Filter	30Hz-100Hz	30Hz-100Hz	30Hz-100Hz	30Hz-100Hz	30Hz-100Hz
Frequency response	16Hz-100Hz	18Hz-100Hz	22Hz-100Hz	18Hz-100Hz	16Hz-100Hz
SPL (peak with room gain)	> 116 dB	> 110 dB	> 108 dB	> 107 dB	> 113 dB
Total Harmonic Distortion	below audibility 16Hz-100Hz	below audibility 18Hz-100Hz	below audibility 22Hz-10Hz	below audibility 18Hz-10Hz	below audibility 16Hz-100Hz
Input sensitivity, left input (10)	250 mVrms 60 mVrms	250 mVrms 60 mVrms	250 mVrms 60 mVrms	250 mVrms 60 mVrms	250 mVrms 60 mVrms
Input sensitivity, right input (10)	0.75 mVrms 200 mVrms	0.75 mVrms 200 mVrms	0.75 mVrms 200 mVrms	0.75 mVrms 200 mVrms	0.75 mVrms 200 mVrms
Input impedance, line level	30 kΩ	30 kΩ	30 kΩ	30 kΩ	30 kΩ
Input impedance, hi-level	50 kΩ	50 kΩ	5.6 kΩ	50 kΩ	50 kΩ
Internal gain, left input (11)	50 dB / 62 dB	50 dB / 62 dB	50 dB / 62 dB	50 dB / 62 dB	50 dB / 62 dB
Internal gain, right input (11)	40 dB / 52 dB	40 dB / 52 dB	40 dB / 52 dB	40 dB / 52 dB	40 dB / 52 dB
Dimensions (H x W x D)	13" x 13" x 13"	11" x 11" x 11"	9" x 9" x 9"	11" x 11" x 11.9"	13" x 13" x 13.9"
Weight	53 lbs	48 lbs	29 lbs	40 lbs	50 lbs

(10) for full output with volume control at 0 dB and for full output with volume control at full clockwise. Sunfire Subwoofers use differential gain on the left and right inputs to retain both L+R and L-R information (11) for full output with Bass Level control at 0 dB / for full output with Bass Level control at full clockwise. Sunfire Subwoofers use differential gain on the left and right inputs to retain both L+R and L-R information