



Starfire™
BassMatrix™
Photon™
Install **Advantage**

Chrysalis™
by Velodyne

Introducing Chrysalis

Chrysalis has a long heritage of excellence with 27 years experience engineering and manufacturing some of the world's most highly rated audio products. Whether it's our unique amplifier designs that are engineered to efficiently reproduce the most challenging special effects in your favorite action adventure movie, or our individually designed and crafted speakers with huge magnets that deliver both low bass and high output, the result is superior sound.

Our focus of lowering distortion - that muddy, boomy annoying sound that detracts from your listening enjoyment - is the key to producing exceptional subwoofers. Chrysalis subwoofers have 1/6 the distortion of our competition. That means for music, our subwoofers are more precise, producing just the right combination of sound level and low bass excitement.

Add a Chrysalis subwoofer to your system and you'll feel like you really are in a high-tech movie theater. Listen to your favorite music and it will sound more lifelike than you ever imagined. A Chrysalis subwoofer will complete your home entertainment environment.

Starfire™ SERIES

Starfire-10, Starfire-12 and Starfire-Mini

With the Starfire Series, Chrysalis is proud to offer stylish, affordable subwoofers that truly deliver deep, powerful, accurate bass, not just weak, muddy, boomy, "mid-bass." Whether your focus is thunderous reproduction of home theater's challenging special effects, or low, tight, dynamic bass that adds that lifelike quality to your music, the Chrysalis Starfire Series produces bass that you can really feel at a price anyone can afford. With over 27 years engineering subwoofer products, you will immediately notice the difference between the Starfire line of subwoofers and their competition.



FEATURES

- Class D amplifiers for more dynamic headroom (reserve power)
- Down-firing port (Starfire-10 and -12) and down-firing bass radiator (Starfire-Mini) for less audible distortion
- Flexible, high quality crossover system
- Adjustable low-pass filter
- Die-cast aluminum baskets
- Phase adjustment

CLASS D AMPLIFIERS — RESERVE POWER TO SPARE

To power these remarkable subwoofers, Chrysalis uses highly efficient digital technology amplifiers capable of producing amazing bass. In addition, each amp incorporates two specialized protection circuits to ensure their long-term durability. As compared to conventional IC amp designs, the Starfire Series amplifiers are more reliable, have more punch and produce more power to accurately reproduce the most difficult bass information.

LOW-NOISE, DOWN-FIRING PORT DESIGN — LESS AUDIBLE DISTORTION

From its inception, Chrysalis has focused on lowering audible distortion. In designing the Starfire 10" and 12", Chrysalis chose a low-noise, down-firing port design to limit the audible noise created by the air moving in the port itself. This enhances low bass performance and output while maintaining musical accuracy.

STARFIRE-MINI — TINY CABINET, AMAZING BASS, MODEST PRICE

An engineering marvel, the Starfire-Mini uses a lightweight, 6.5" aluminum cone and a down-firing 8" passive radiator to generate amazing, low distortion bass, at a modest price. The dish-shaped aluminum cone limits standing waves and maximizes output. Starfire-Mini's tiny (11" x 10" x 12") dimensions have tremendous interior-decorator appeal. It is small enough to be easily hidden, but its furniture quality cabinet and gloss black trim look great with any decor.



Model	STARFIRE-10	STARFIRE-12	STARFIRE-MINI
Woofer	10" (24.5 cm) forward firing (8.2" piston diameter)	12" (30.5 cm) forward firing (9.7" piston diameter)	6.5" (16.5 cm) active (5" piston diameter) and 8" (20.3 cm) passive (6.5" piston diameter)
Amplifier Class D	250 watts Dynamic 150 watts RMS Power	275 watts Dynamic 165 watts RMS Power	300 watts Dynamic Power 180 watts RMS
Cabinet Design	Acoustically neutral, down-firing port	Acoustically neutral, down-firing port	Acoustically neutral, down-firing passive radiator
Frequency Response	32-140 Hz +/- 3 dB	29-140 Hz +/- 3 dB	38-140 Hz +/- 3 dB
High-Pass Crossover	Full range	Full range	Full range
Low-Pass Crossover	50-200 Hz	50-200 Hz	50-200 Hz
Phase	0° or 180°	0° or 180°	0° or 180°
Magnet Structure	89.6 oz. (5.6 lbs)	89.6 oz. (5.6 lbs)	64 oz. (4.0 lbs.)
Voice Coil	2" copper-wound	2" copper-wound	2" copper-wound
Inputs	RCA Line Level/LFE and Speaker Level inputs	RCA Line Level/LFE and Speaker Level inputs	RCA Line Level/LFE and Speaker Level inputs
Outputs	Left and right speaker pass-through	Left and right speaker pass-through	Stereo, left and right, speaker level
Auto On/Off	Yes	Yes	Yes
Removable Grille	Yes	Yes	Yes
LED Power Indicator	Yes	Yes	Yes
Cone	Coated cellulose fiber	Coated cellulose fiber	6.5" and 8" Anodized Aluminum Cones
Finish	Black vinyl	Black vinyl	Black Ash Wood-grain with Black Gloss trim
Dimensions: (H/W/D) (inc. feet & grille)	13.6" x 12.6" x 14.9" (34.5 x 32 x 37.8 cm)	15.1" x 14.2" x 18.9" (38.4 x 36 x 48 cm)	11" x 10" x 12.6" (28 x 25.4 x 32 cm)
Warranty (parts/labor)	3 years Electronics 5 years Driver	3 years Electronics 5 years Driver	3 years Electronics 5 years Driver
Shipping Weight (approx.)	30 lbs. (17 Kgs)	36 lbs. (20 Kgs)	18.5 lbs. (8.4 Kgs)

BassMatrix™ SERIES

DSP-Controlled BassMatrix-10 and BassMatrix-12

The new, remote controlled BassMatrix Series is powered by time tested and proven amplifiers, each digitally tuned and controlled. You can customize your listening experience by selecting any of four digital presets on its remote-control: one each for Movies, R&B/Rock, Jazz/Classical, and Games, plus Chrysalis' Night Mode setting.

FEATURES

- DSP digital control for greater accuracy
- Convenient full-feature remote control
- 4 customized digital presets
- Night-mode setting
- Built-in High Dynamic Power (HDP) amplifiers
- Anti-clipping circuitry to limit amplifier distortion

DSP CONTROLLED

The BassMatrix Series features full Digital Signal Processing (DSP) at very affordable prices. All functions are controlled digitally: the four individual presets for customized listening; volume control; night mode; low-pass crossover and slope; subsonic frequency and slope; distortion-limiting and protection circuitry. DSP control and tuning means that the BassMatrix subwoofers produce the lowest distortion, deepest bass and the highest output possible, while reproducing music accurately and complementing your main speakers.

CONVENIENT REMOTE CONTROL

The included full-feature remote control makes it a snap to integrate your BassMatrix subwoofer into your system and access your listening preferences from the comfort of your favorite chair.

Presets: Choose between four presets - Movies, R&B/Rock, Jazz/Classical, or Games. By pushing a single button you can customize your listening for any performance or program material.

Night Mode: Limits the maximum output of the subwoofer for late night listening, or to be considerate of close neighbors.

Volume Control: Volume control allows you to balance the output from the subwoofer to your system.

Light Control: Turn the blue front panel lights on your BassMatrix sub on or off with the light control.

Phase Adjustment: Lets you get the best possible match between your front system speakers and your subwoofer.

ENGINEERED FOR LOW-DISTORTION

One key to the BassMatrix subwoofers' superior sound is specialized distortion limiting circuitry. These circuits produce real performance advantages, including: more usable power, deeper bass extension, bigger impact, and less distortion.

HIGH DYNAMIC POWER (HDP) AMPLIFIERS

BassMatrix amplifiers deliver enormous output with huge power reserves. Chrysalis BassMatrix subwoofers are able to reproduce the dramatic impact of special effects, pulsing drumbeats, and the ultra-low pedal notes of an organ.



LONG-THROW DRIVERS

The two custom designed “Long-Throw” drivers with vented pole-pieces have increased power handling and long-term reliability. 4-Layer large copper-wound voice coils are matched with massive magnets to provide dynamic bass you can actually feel.

FLEXIBLE CROSSOVER WITH CROSSOVER BY-PASS

Their flexible crossover systems allow each subwoofer to ideally match any speaker system and room acoustics. Chrysalis’ Crossover By-pass feature connects directly to the output of the Low Frequency Effect (LFE, or “.1”) channel of a Dolby Digital receiver or processor, without the loss of impact or accuracy.

CABINET DESIGN

Using a front-firing, slotted bass-reflex design, similar to those used to reproduce bass in live concerts, limits the distortion found in ported cabinets known as “port noise” and maximizes bass impact. Hidden away or proudly shown off, these subwoofers will complete your home theater with style.

Model	BASSMATRIX-10	BASSMATRIX-12
Woofer	10" forward firing (8.2" piston diameter) with vented pole piece	12" forward firing (9.9" piston diameter) with vented pole piece
Amplifier Class D	375 watts Dynamic 185 watts RMS Power	400 watts Dynamic 200 watts RMS Power
Cabinet Design	Slot-Loaded Bass-Reflex	Slot-Loaded Bass-Reflex
Frequency Response	28-120 Hz +/-3 dB	25-120 Hz +/-3 dB
High-Pass Crossover	80-100 Hz (6 dB/octave)	80-100 Hz (6 dB/octave)
Low-Pass Crossover	60-150 Hz (adjustable) (12 dB octave, 24 dB ultimate)	60-150 Hz (adjustable) (12 dB octave, 24 dB ultimate)
Phase	0°, 90°, 180°, 270°	0°, 90°, 180°, 270°
Magnet Structure	5.5 lb. (88 oz)	7.8 lb. (125 oz)
Voice Coil	2" 4-layer copper	2" 4-layer copper
Inputs	Gold plated line-level and speaker-level	Gold plated line-level and speaker-level
Outputs	Line-level and speaker-level	Line-level and speaker-level
Presets	Movies; R&B-Rock; Jazz-Classical; Games	Movies; R&B-Rock; Jazz-Classical; Games
Auto On/Off	Yes	Yes
Crossover Bypass	Yes	Yes
Cone	Reinforced fiber	Reinforced fiber
Low Distortion Technology	Yes	Yes
Finish	Black gloss front with black vinyl body	Black gloss front with black vinyl body
Dimensions: (H/W/D) (inc. feet & grille)	15.9" x 15" x 16.8" (40.4 x 38 x 42.7 cm)	18" x 15" x 18" (45.7 x 38 x 45.7 cm)
Warranty (parts/labor)	3 years Electronics 5 years Driver	3 years Electronics 5 years Driver
Shipping Weight (approx.)	54 lbs (24.5 Kgs)	60 lbs (27.3 Kgs)



Photon™ SERIES

Photon-8 and Photon-10

Experience the power and precision of very small, high-performance subwoofers developed using over 25 years of subwoofer design and engineering heritage. The Photon Series of tiny, accurate, high output subwoofers consists of the 8" Photon-8 and the 10" Photon-10.

FEATURES

- Tiny dimensions
- Proven Class D digital amplifiers (2000 watts Dynamic Power)
- Energy Recycling Circuitry makes the amps better than 95% efficient
- Massive magnet structures
- Kevlar reinforced, resin cones
- Die-cast aluminum baskets
- Dual inside/outside voice coil drivers



INCREDIBLY SMALL

Due to their compact size, sealed cabinet and single front firing driver design, the Photon Series subwoofers are easily hidden in a corner or built into a cabinet. Styled to fit easily into any décor, these tiny subwoofers give huge home theater performance, despite their size. They are also an ideal addition to a "sound-bar", in-wall speakers or to fill-in the missing bass in the tiny speakers often used with flat-screen TVs. Custom installed or just tucked away in your home entertainment room, the Photon Series subs are the perfect solution for getting the full home theater experience without the "sore thumb" of an oversized box detracting from your personal style.

"GREEN" DIGITAL AMPLIFIERS

The Photon Series incredibly small size is just the beginning. These new subs feature highly efficient, reliable Class D digital amplifiers. Each subwoofer is driven by 2000 watts of dynamic power to deliver all the impact and excitement of the most dramatic special effects. And, with 1000 watts of continuous RMS power, they accurately reproduce the lowest musical frequencies with detail and definition not found in any other subwoofers in their price range, regardless of size. Rated at over 95% efficiency, the Class D amplifiers used in the Photon subs generate minimum heat, making them incredibly reliable.

WORLD-CLASS DRIVERS

To complement this powerful amplifier, Chrysalis has developed massive drivers with multi-layer, Kevlar reinforced, resin cones mounted in die-cast aluminum baskets. Each driver incorporates an inside/outside, two-layer copper voice coil that assures linear travel, and allows for the heat dissipation needed to handle the gigantic power delivered by the Class D amps. These technological breakthroughs in amplifier and speaker design allow the Photon subs to create room-shaking bass for home theater applications in spite of their tiny size.

LOW DISTORTION

In addition, Chrysalis incorporates exclusive distortion limiting circuitry to assure tight, accurate, musical bass. These result in linear cone movement, and control the driver's frequency and distortion characteristics. This reduces the distortion to 1/6th that of competitive subwoofers.

Like all Chrysalis subwoofers, the Photon Series incorporates anti-clipping circuitry to limit amplifier clipping distortion. Chrysalis' Crossover By-pass feature assures a perfect match and optimum performance in any music or home theater system.

THE PHOTON SERIES DELIVERS!

With over twenty-seven years of experience building accurate, world-class subwoofers, you can depend on Chrysalis' Photon Series to deliver the room-shaking excitement of home theater, the bass extension of the lowest organ pedal notes, the detail and definition of a jazz string bass and the beat of your favorite hard-driving music, and do it all in a cabinet that all but disappears in your living environment.

Model	PHOTON-8	PHOTON-10
Woofers	8" forward firing (6.5" piston diameter)	10" forward firing (8" piston diameter)
Amplifier Class D	2000 watts Dynamic 1000 watts RMS Power	2000 watts Dynamic 1000 watts RMS Power
Cabinet Design	Sealed enclosure	Sealed enclosure
Frequency Response	26-120 Hz +/-3 dB	23-120Hz +/-3 dB
High-Pass Crossover	80 or 100 Hz (6 dB/octave slope)	80 or 100 Hz (6 dB/octave slope)
Low-Pass Crossover	40-120 Hz (adjustable) (12 dB octave initial, 24 dB ultimate)	40-120 Hz (adjustable) (12 dB octave initial, 24 dB ultimate)
Phase	0° or 180°	0° or 180°
Magnet Structure	204 oz. (12.7 lbs)	346 oz. (21.6 lbs)
Voice Coil	2.5" Dual layer inner/ outer wind	3" Dual layer inner/ outer wind
Inputs	Gold plated line-level and speaker-level	Gold plated line-level and speaker-level
Outputs	Line-level, 80Hz up	Line-level, 80Hz up
Digital Dynamic Driver Control with Current-Sensing Servo	Yes	Yes
Crossover Bypass	Yes	Yes
Cone	Kevlar reinforced resin	Kevlar reinforced resin
Auto On/Off	Yes	Yes
Finish	Black ash vinyl	Black ash vinyl
Dimensions: (H/W/D) (inc. feet & grille)	10.063" x 10.375" x 12.75" (27 x 26 x 33 cm)	12.313" x 12.375" x 13.875" (32 x 31 x 36 cm)
Warranty (parts/labor)	3 years Electronics 5 years Driver	3 years Electronics 5 years Driver
Shipping Weight (approx.)	35 lbs. (16 Kgs)	46 lbs. (21 Kgs)

Install*Advantage* SERIES

IA-400 Amplifier and IA-IWS1 In-Wall Subwoofer

Chrysalis Acoustics offers the InstallAdvantage Series – an affordable, easy-to-install in-wall subwoofer with matching amplifier, providing powerful bass with minimal wall vibration. The Chrysalis IA-IWS1 In-Wall Subwoofer easily hides in the wall while playing the incredibly powerful bass demanded by high-quality home theater and music systems. The combination of the IA-400 amp and IA-IWS1 subwoofer delivers great bass and virtual invisibility, with minimal unwanted wall vibration.

FEATURES

IA-400 Amplifier

- One-touch, 5-band, Auto-EQ room bass correction
- Full feature IR remote control
- Four customized listening mode presets
- Easy connection to the sub with conventional speaker wire
- Complete with ears for rack-mounting

IA-IWS1 In-Wall Subwoofer

- Fits flush in standard 2x4 studded wall
- Minimum wall vibration with triple vector design
- Easy to install for new construction or retrofit
- Amazing deep, powerful, low distortion bass performance
- Requires an IA-400 amplifier

IA-400 AMPLIFIER

The IA-400 amplifier is a 400 watt dynamic, 200 watt RMS, 2 unit high, rack-mountable amplifier. This proven, reliable A/B design is very musical sounding, with superior headroom for clean, powerful bass. The IA-400 amp is digitally tuned with DSP software, to perfectly match the IA-IWS1 sub. Digital precision assures maximum driver excursion and bass output, without risk of overdriving the subwoofer. Crossover frequency control, duplicate volume controls, and mic jack for room-bass EQ are on the amplifier's front panel for easy setup. Configuring the amp to optimize the IA-IWS1 sub's performance is front-panel accessible.

The IA-400 amp includes a remote control with four bass presets to customize your movie or music listening. Subwoofer volume and phase are adjustable for perfect speaker blending. A restricted-dynamics "night mode", mute switch, and a display light control are also included on the remote control.



IA-400



IA-IWS1



Subwoofer placement in a room can dramatically impact its performance. An installed sub is physically fixed, so for the best sound it must be equalized for its room environment and placement. Just place the included mic in the preferred listening position, and push the remote control's "EQ" button. The internal signal generator's tones are digitally analyzed by DSP, and the 5-band equalizer is automatically adjusted for the best bass performance, regardless of subwoofer placement.



IA-IWS1 IN-WALL SUBWOOFER

The IA-IWS1 In-wall Subwoofer fits flush in a standard 2x4 studded wall, and incorporates a self-contained cabinet (no need for a separate back-box), for easy retrofit or new construction installation. It delivers tight, dynamic bass for music and home theater. A unique counter-balanced design, with twin active 6.5" long-throw drivers and twin custom passive radiators firing at 45 degree angles to the drivers, the IA-IWS1 maximizes excursion within the wall cavity, reducing wall vibration by 50% vs. other in-wall subs. This design creates a bass radiating surface equal to a 14" driver, yet fits flush in a 2x4 wall with a small footprint. The sealed cabinet's sides attach to standard 2x4 studs with four drywall screws, two per side. Its top and bottom attach to the drywall with six clamps, making installation fast and easy.

Model	IA-400 Amplifier	Model	IA-IWS1 In-Wall Subwoofer
Amplifier Class A/B	400 watts Dynamic 200 watts RMS Power	Woofer	Two 6.5" active drivers Two 12.5" x 3" passive drivers
High-Pass Crossover	80 Hz (6 dB/octave)	Frequency Response (+/-3)	37-120Hz
Low-Pass Crossover	30-160 Hz, Defeatable, 24 dB/octave slope	Harmonic Distortion	<5% (typical)
Inputs	Line and Speaker Level	Magnet Structure	64 oz. (4 lbs) each active 128 oz. (8 lbs) total
Outputs	Line level, 80Hz up, speaker level	Voice Coil	4-layer copper
Phase	0°, 90°, 180°, 270°	Dimensions (H/W/D) (Inc. feet & flange)	18.6" x 16.5" x 4.3" (47.2 x 42 x 11 cm) ** Excludes grilles, mounting tabs, etc.
Dimensions: (H/W/D) (inc. feet & grille)	3.6" x 17" x 13" (9 x 43.2 x 33 cm) **Allow two extra inches in depth for wire connectors and power cable. **Includes feet. Feet can be removed for rack mount use. Unit is approximately "two rack units" high.	Grille	16.25" H x 14" W
Warranty (parts/labor)	Three years (electronics)	Cut-out Dimensions	16.67" H x 14.5" W"
Shipping Weight (approx.)	25 lbs (22.7 Kgs)	Cabinet	Passive radiator design
		Warranty (parts/labor)	Five years (drivers)
		Shipping Weight (approx.)	22 lbs. (9 kg)

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With a **27 year** Heritage

... of building state-of-the-art subwoofers, Chrysalis subwoofers are the perfect foundation for any music or home theater system. Born in the 1980's, before the dawn of home theater, Chrysalis' history is founded in accurate, low distortion audio reproduction. However, as the promise of true home theater becomes more of a reality with High Definition Digital TV and large flat screens that truly bring the theater experience into your home, many times the missing element is the thunderous impact of today's movie's special effects. Chrysalis handles this challenge with

Deep powerful Bass that brings the large screen picture to life.

So, whether your focus is music, movies or even games, Chrysalis subwoofers are the perfect complement to your system.

Chrysalis

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