

# Procella Audio CATALOG

#### **Dedicated Immersive Audio Speaker Systems**

From the singing bird to the raging thunderstorm, Procella Audio speakers are designed to produce life-like and natural reproduction of both the delicacy and impact of sound. Whether you are enjoying the latest blockbuster movie or your favorite classical, rock or pop music, your Procella Audio speaker system will bring it all to life.

15 years ago, Procella Audio was born out of necessity, for a screening room at the DTS headquarters outside London. Procella was the answer to the need for an accurate, powerful and extremely dynamic loudspeaker that satisfied not only DTS cinema requirements but also master tape playback of high-resolution multichannel music recordings.

Over the years, our product line has refined and expanded into today's comprehensive lineup. Procella offers products for all audio environments - ranging from residential living rooms and home theaters to postproduction and music studios, and even to commercial cinemas.

Thank you for taking the time to consider Procella. We hope that you will enjoy reading our catalog and that we will be able to help you achieve maximum performance and maximum enjoyment from your home cinema

ANDERS UGGELBERG, CEO





#### Introduction

Speakers designed for the DTS headquarters theatre now available for your home cinema

01

#### Loudspeakers

Any room size, any number of seats, we have the loudspeaker models to match

08

#### **Architectural Loudspeakers**

Identical Voice® timbre-matched loudspeakers to match all Procella models

12

#### **Full Range Loudspeakers**

Ultimate sound quality for the finest home theatres and most demanding listeners

19

#### Subwoofers

Deep and powerful, Procella subwoofers are legendary for their performance

23

#### **Amplifiers**

The perfect companion to Procella loudspeakers, with DSP

**28** 

# INTRODUCTION

"Procella Audio - They might be giants... and they'll sound fantastic. They were originally designed for the reference theatre at DTS' London headquarters, but now the new Procella Audio speakers and subwoofers can be part of your home theatre..." - Home Entertainment magazine



The very first Procella Audio loudspeakers were designed in 2005 by Anders Uggelberg and Gerben Van Duyl, for a brand-new DTS Preview Theatre located at the DTS Europe headquarters at Twyford, in the Thames Valley area of England.

Anders Uggelberg was at the time the Director of Cinema Technology for DTS Europe. Gerben was head of Business Development. When the expansion of the DTS offices gave the company the opportunity to build a state-of-the-art preview cinema, Anders and Gerben were asked to design and commission the room.

The specific requirements for the DTS Theatre were for a medium size room of about 30 seats that exhibited superior audio capabilities for both cinema and home entertainment sources, in all existing and future DTS surround sound formats, including 5.1 channel music recordings and high-resolution audio up to 24 bit 96KHz. The founding partners searched for a speaker system with the ability to properly reproduce cinema material for 30 seats as well as deliver the resolution and accuracy needed for high-res music, but none could be found on the market. Once they decided to design the speakers themselves, the rest was history.

Meeting the exacting requirements of the DTS Theatre required that the design of the speakers be aimed 'up' at the highest common denominator between the cinema and home entertainment requirements. Anticipating the future requirements for high-performance home cinema, Anders skillfully blended the elements of cinema speaker and HiFi home speaker design, bringing the best of both worlds through meticulous acoustic design, careful selection of the very best driver components, sophisticated mathematical modeling, and optimization through performance testing.

# PROCELLA'S VISION

#### Inspiration.

Immersive sound is not an invention of the film or audio industry; it is a fact of life. In the modern world, sound is all around us, all the time. Sometimes pleasant, sometimes a source of stress. It is constantly around us; our lives are immersed in sound.

#### Mission.

Designing speakers without compromise: if we can find a better way, we use it. Our objective is to offer you speaker systems that enable you to hear everything that the sound designer, director and music producer heard when creating the sound tracks and albums you are about to enjoy. Delivering their artistic intention is the ultimate measure of a loudspeaker system, and that is our goal. If you want the best speaker system money can buy, you have found it.







#### Loudspeaker

#### surround, height channels

The versatile P1 is the compact and attractive solution for surround and height channels in small to medium rooms. Its fully symmetrical dispersion and angled baffle ensure optimal performance regardless of horizontal or vertical orientation or whether it is located on the room's walls or ceiling. Designed for the requirements of Dolby Atmos. A flush-mount ceiling bracket is available.

Dimensions (HxWxD): 340 x 210 x 120mm/100mm (7 ° tilt)

**Frequency Response** 

80Hz - 20kHz (-3dB)

Sensitivity

89dB 1m / 1W

**Maximum SPL** 

105dB continuous

111 dB Peak

**Power Handling** 

75W continuous

## **Speakers for Dolby Atmos**

Mixers creating soundtracks and music recordings in Dolby Atmos have the flexibility to place sounds anywhere in three-dimensional space. Sounds are not sent to specific channels; instead the mixer creates what are called audio objects, which can then be placed to be heard at any location in the soundfield.

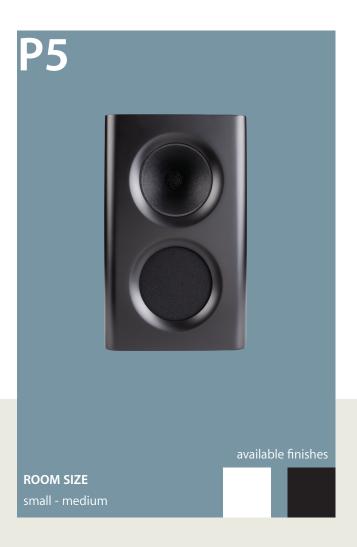
Optimal reproduction and precise imaging of these objects requires speakers designed for the application.

- Height speakers should be closely timbre-matched to the ear-level speakers. Procella's Identical Voices concept ensures a timbre-match among all speaker models.
- Height speakers should have directivity and dispersion that directs high frequencies to the ears of all the listeners.

  Procella's constant directivity waveguides provide wide, symmetrical and predictable coverage in the room.
- Height speakers should match the dynamic range of the main speakers. Procella specifies the output capability of
  all models, enabling designers to select the appropriate model. Using a higher crossover point to the subwoofer
  is acceptable for height speakers and will increase dynamic range

**ADVICE** 

Please contact your local dealer or installer to assist you.





#### Loudspeaker

#### main, surround, height channels

In a classic compact bookshelf profile, the P5 delivers Procella performance that sets the standard for output and dynamic range in its size and price class. With its 1 inch compression driver mounted on a circular waveguide, both vertical and horizontal orientation are enabled. Highly flexible, the P5 can be used as a main speaker in small rooms and as surround or height channel speakers in small to medium size rooms.

Dimensions (HxWxD): 304 x 190 x 170mm

Frequency Response	Maximum SPL	
0011= 20141= ( 2 dB)	113dB continuous	
90Hz - 20kHz (-3dB)	119dB peak	
Sensitivity	<b>Power Handling</b>	
01 dD 1 mg / 1\M	75W continuous	
91dB 1m / 1W	250W neak	

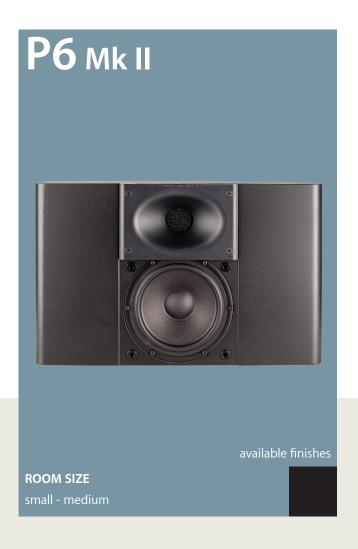
#### Loudspeaker

#### main, surround, height channels

The P5V is the identical twin of the P5 acoustically, but it offers a slim, softly sculptured look that is highly attractive next to flat panel or projection screens and when the speaker is being used for surround channels. It can be mounted vertically or horizontally thanks to its circular waveguide. Only 115mm/4.5" deep.

Dimensions (HxWxD): 470 x 190 x 115mm

Frequency Response	Maximum SPL	
90Hz - 20kHz (-3dB)	113dB continuous	
90HZ - ZUKHZ (-3UB)	119dB Peak	
Sensitivity	Power Handling	
91dB 1m / 1W	75W continuous	
SIUD IIII/ IW	250W peak	



#### Loudspeaker

#### main, surround and height channels

The P6 brings Procella reference quality audio and a very wide dynamic range in a slim-profile cabinet (only 4.9"/125mm deep). This makes for elegant integration with flatscreens, projection screens, and into surround speaker environments. It produces uncompressed dynamics at high output levels with lifelike clarity for music and movies.

Dimensions (HxWxD): 290 x 470 x 125mm

90dB 1m / 1W

Frequency Response

70Hz - 20kHz (-3dB)

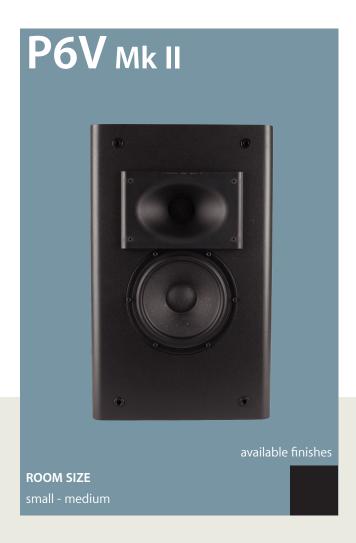
Maximum SPL

116dB continuous
122dB Peak

Sensitivity

Power Handling
100W continuous

300W peak



#### Loudspeaker

#### main, surround and height channels

All of the performance of the classic P6, in a tall and slim profile cabinet. Only 4.9"/125mm deep. Its form factor blends elegantly next to flat panel and projection screens when used as a main channel speaker, and enables the speaker to be concealed in columns when used as a surround. The go-to surround channel speaker in systems using the P815, P28 and P8 as the main speakers.

Dimensions (HxWxD): 470 x 290 x 125mm

Frequency Response

70Hz - 20kHz (-3dB)

Sensitivity

90dB 1m / 1W

Maximum SPL

116dB continuous

122dB Peak

Power Handling

100W continuous

300W peak



# Loudspeaker Loud

The P8 is capable of stunning reproduction of the full dynamic range of 96K/24-bit music and film soundtracks in large rooms with extremely low distortion, studio accuracy and audiophile sound quality. This high-resolution, high-output device enables listeners to hear every element of sound, including the most subtle details, at any playback level.

THX Approved for professional audio applications.

main, surround and height channels

Dimensions (HxWxD):

410 x 450 x 200/138mm (7° tilt)

Frequency Response	Maximum SPL
0011- 20141- ( 240)	122dB continuous
80Hz - 20kHz (-3dB)	128dB Peak
Sensitivity	Power Handling
00 ID 4 /411/	250W continuous
92dB 1m / 1W	

1,000W peak



#### Loudspeaker

#### Main channels

The P28 is capable of massive output despite its size. It is an 8 meter THX reference level speaker with an 80 Hz crossover. Its D'Appolito design minimizes floor and ceiling reflections for improved audio quality. When you need maximum dynamic range, especially in very large rooms, but can't accommodate the size of a full-range Procella speaker, the P28 is the powerful choice!

Dimensions (HxWxD): 620 x 450 x 190mm

Frequency Response	Maximum SPL
75Hz - 20kHz (-3dB)	128dB continuous
	132dB Peak
Sensitivity	Power Handling
OF-ID 1 / 11//	500W continuous
95dB 1m / 1W	>1,000W peak



#### **Architectural Loudspeaker**

#### surround, height channels

The P5iCW is a highly flexible and high performance in-wall/in-ceiling solution optimized for Dolby Atmos and DTS:X immersive audio systems. Its 1" compression driver and waveguide are angled at 15 degrees to enable the installer to orient the speaker for maximum sound quality, and its square grill ensures visual symmetry when multiples are used.

Dimensions (HxWxD): 340 x 340 x 100mm

Frequency Response Maximum SPL

90Hz - 20kHz (-3dB)

119dB Peak

Sensitivity Power Handling
75W continuous
91dB 1m / 1W
250W peak



#### **Architectural Loudspeaker**

#### main, surround and height channels

With the identical components and performance as the acclaimed P6 and P6V Mk II speakers, the P6iW Mk II is the architectural solution for rooms where the speakers need to be discretely concealed. Its pro audio componentry ensures performance vastly exceeding that of conventional in-wall speakers. The flat baffle enables use as either a main or surround speaker.

Dimensions (HxWxD): 490 x 340 x 100mm

Frequency Response

70Hz - 20kHz (-3dB)

Maximum SPL

116dB continuous
122dB Peak

Sensitivity

Power Handling

90dB 1m / 1W 100W continuous 300W peak

# P8iCW Grilles included ROOM SIZE medium - large

#### **Architectural Loudspeaker**

#### surround and height channels

Based on the award-winning Procella P8 loudspeaker, the P8iCW is a highly flexible, high performance in-wall/inceiling solution for Dolby Atmos, Auro-3D, and DTS:X. Its tweeter and waveguide are angled at 15 degrees, giving you the ability to install each speaker so its dispersion is optimized for the listeners, whether used for a Height, Wide, Main or Surround channels.

Dimensions (HxWxD) / Cut out dimensions: 530 x 530 x 179mm / 490 x 490 x 180mm

Fred	uency	v Res	ponse
1166	aciic '	y iics	POIIS

70Hz - 20kHz (-3dB)

#### Sensitivity

92dB 1m / 1W

#### **Maximum SPL**

122dB continuous 128dB Peak

#### **Power Handling**

250W continuous 1,000W peak

#### P5iCW / P8iCW

Based on the Procella P5 and P8 loudspeakers, the P5iCW and P8iCW are highly flexible optimized high performance in-wall/in-ceiling solutions for Dolby Atmos, Auro-3D, and DTS:X immersive audio systems. Their tweeters and waveguides are angled at 15 degrees, giving designers the ability to place all speakers to provide optimal dispersion, whether used as a Top/Height channel, a Wide channel, or an ear-level Surround channel. The key is the circular waveguide and square enclosure/grille shape. Regardless of the number of channels in a system, each speaker can be oriented so that its high frequencies are directed towards the listeners, while its grille remains visually symmetrical with all the other speakers, whether the speaker needs to be aimed backward, forward or sideways.

- Identical Voice® timbre-matched to Procella P860, P815, P610, P28, P8, P6 and P5 families
- All MDF sealed-box design with integral back box
- Removable front haffle houses the drivers crossover and input terminals
- Wing clamp mounting is easy, quick and enables speaker removal

## Why should my theater have a baffle wall?

A baffle wall is a wall built independent from the room walls, into which the screen speakers (LCR) are mounted. It is a core component of all THX certified cinemas. We strongly recommend that dedicated theaters using Procella speakers incorporate a baffle wall, as this ensures optimal performance.

#### Baffle walls have several important benefits.

- · Significantly increases the maximum output capability of the speakers and subwoofer
- · Creates an acoustic image the size of the screen, not the speakers
- · Significantly improves tracking of sonic images and screen images, avoiding jumps of sound between screen channels often heard in home theater systems
- · Eliminates diffraction from speaker cabinet edges
- · Reduces or eliminates sound reflected back through the screen and from the back wall behind the screen



# **Above Screen Loudspeakers**

The introduction of large "Video Wall" micro LED displays such as Sony's Crystal LED and Samsung's 'The Wall' is one of the most exciting advances in extreme home cinema. However, moving the speakers from behind the screen creates a major challenge: how do we match the location of the sonic images created by the loudspeakers to the visual image locations on screen?

The extensive commercial cinema experience of Procella's co-founder Anders Uggelberg places Procella Audio a step ahead of the competition. Working with a European cinema exhibitor, a solution they created to this acoustical dilemma for commercial cinemas that use solid projection screens. This solution places the speakers above the screen.

Procella Above Screen speakers have mid and high frequency drivers mounted on a baffle angled towards the listeners, with waveguide and crossover designs that further direct sound towards listeners, who then perceive the sound as coming from the screen. Procella's proven track record in commercial cinemas includes hundreds of speakers currently in daily use in commercial cinemas. This technology is now available in select models for home theaters with video walls and solid (non-perforated) screens.

#### Loudspeaker

#### **Above Screen LCR**

The P628 Above Screen full-range loudspeaker is especially designed for cinemas where placement behind an acoustically transparent screen is not possible. For high-performance home theatres and screening rooms incorporating a Video Wall micro-LED display or a solid projection screen, the P628 is the LCR speaker of choice.

Dimensions (HxWxD): 730 x 300 x 250/170mm (7° tilt)

Frequency Response

80Hz - 20kHz (-3dB)

122dB continuous
128dB Peak

Sensitivity

Power Handling
100W continuous
300W peak



# 8 things about Procella

#### Scalable and affordable

Procella's Identical Voices concept timbre-matches all models, with a range covering any size room from 2 to 200 seats.

1

#### Maximum cinema performance and impact

Procella speakers are designed to Dolby, DTS, and THX commercial cinema standards. Procella speakers produce levels up to 105 dB+ at listeners' ears in any size room.

2

#### Every seat hears good sound and imaging

Constant directivity waveguides deliver wide, symmetrical coverage at all frequencies, so every seat hears well-balanced sound. Dome tweeters beam sound to a narrow sweet spot.

3

#### Less listening fatigue

Clean and undistorted sound at high playback levels enables listeners to enjoy extended listening, even at cinema reference levels.

4

Play louder and cleaner

Procella speakers simply play louder and cleaner than conventional speakers, using pro audio compression drivers for greater efficiency and power handling.

Massive subwoofer output

Dual 15, dual 18 and dual 21 inch subwoofers provide cinema impact in even the largest rooms with lightning-quick response, quick transient response, and extended deep bass.

Easy to install
Slim shallow cabinet designs (include

Slim, shallow cabinet designs (including subwoofers) easily accommodate speaker placement on wall, built into wall, or concealed behind fabric and screens.

Easy to drive

High-efficiency designs require less amplifier power. P6 and P5 speakers achieve excellent results with better-quality receivers.

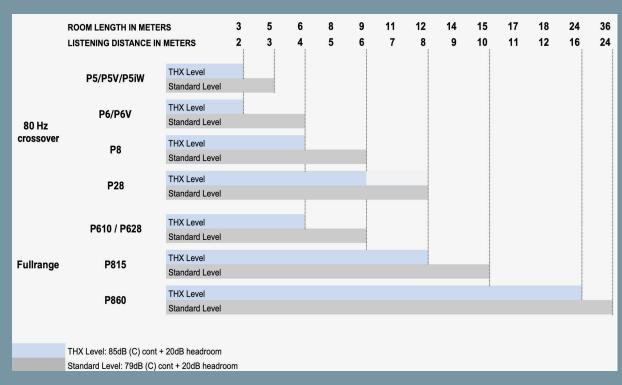
# Choosing speakers by listening distance

High quality commercial cinemas are designed according to audio specifications created by THX and Dolby. Among these standards are requirements for all speakers to play at a reference level. Unlike music recordings, all films have a standard: they are monitored and mixed with the dialog set at a level of 85dB at the mix position. Digital soundtracks add an additional 20dB of dynamic range, which means that the reference level of the loudest sound, per channel, is 105 dB at the listener's ears.

Procella loudspeakers are designed to meet the same standard. Because sound level varies according to the distance from the source, we specify our speaker models according to the distance at which they produce reference level playback. For your theater, the key factor is the distance from your speakers to the main listening locations.

The chart on page below of this catalog lists each Procella model, with the distance at which each speaker is capable of reference level playback. Because not everyone listens to movies at full reference level, we have also provided information for what we call Standard Level playback. This specification is based on an alternate accepted playback level for nearfield listening: a dialog level of 79dB.

Because THX specifications require that theaters be capable of producing reference level to 2/3 the depth of the room, the chart also shows a reference for room length, applying the THX room standard.



This chart shows the recommended Procella model for any theater up to 36 meters deep.



The P610 is the most compact full-range Procella loudspeaker, adding a 10" woofer to the P6 and extending response down to 40 Hz for small to mid-size home theaters. Use a Procella amplifier for biamplification: two amplifier channels and a DSP crossover are required, giving listeners an improvement in audio quality and a wider dynamic range.

**Frequency Response** 

**Maximum SPL** 

40Hz - 20kHz (-3dB)

122dB continuous 128dB peak

Sensitivity

92dB 1m / 1W

Power Handling (Hi/Lo) 100W/300W cont. 300W /1000W peak

The P610 is our most compact full range loudspeaker system that is capable of producing THX© reference levels in small or medium home cinemas. Procella's design philosophy let's you playback 24bit/96KHz movies, series and music dynamically as intended without any distortion.

Dimensions (HxWxD): 700 x 540 x 150mm

TIP

You can start with the P6 main / LCR loudspeaker for your Procella home cinema system, and then upgrade in the future by adding a P10Si to make a full-range speaker. (amplifier with DSP crossover is necessary)



The P815 is THX Approved for integration into professional rooms, including THX Certified Screening Rooms and THX pm3 (professional Mixing, Monitoring and Mastering) studios.

Frequency Response Maximum SPL

40Hz - 20kHz (-3dB)

126dB continuous
132dB peak

 Sensitivity
 Power Handling (Hi/Lo)

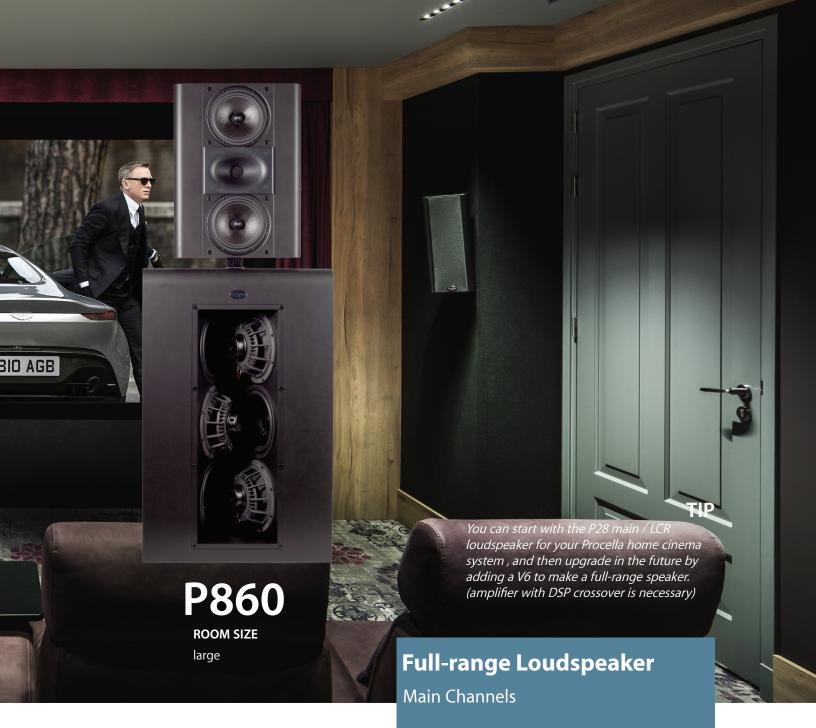
 96dB 1m / 1W
 250W/700W cont.

 1000W /1500W peak

The P815 is a reference-quality, precision full-range speaker designed for large home cinemas. From revealing the smallest details to producing the awesome impact of a full-scale 96/24 recording or film soundtrack, with the P815 you become one with the performance. The P815 is THX approved for integration into professional rooms.

The P815 is a combination of the P8 reference loudspeaker with the P15Si 15" low-frequency module to produce THX cinema reference levels at an incredible 8 meters.

Dimensions (HxWxD): 1030 x 480 x 280mm



The P860 is Procella's flagship and the ultimate full-range main speaker. Capable of peak levels up to an incredible 138 dB, with THX reference level output at 16 meters (over 52 feet!), this speaker is designed for rooms up to 24 meters (80 feet) deep, enabling it to fill even mid-sized commercial theaters with highly accurate, dynamic sound.

The P860 combines the P28 mid/high frequency module combined with the low-frequency enclosure V6.

Dimensions (HxWxD): 1720 x 670 x 300mm

The P860 mates the P28 mid/high frequency module with Procella's V6 Power, utilizing six professional 10-inch woofers in a push-pull, distortion cancelling configuration that produces massive impact and dynamics.

dynamics.

Frequency Response

**Maximum SPL** 

40Hz - 20kHz (-3dB)

132dB continuous

138dB peak

Sensitivity

99dB 1m / 1W

Power Handling (Hi/Lo)

250W/3x700W cont. 1000W /2100W peak

# Subwoofers

Today's immersive film soundtracks have bass that is deeper and more powerful than ever before. Sound designers are enhancing the movie experience by capturing and creating very low frequency content that they understand will be played back in commercial cinemas at very high levels. The best cinemas use multiple large professional subwoofers and high powered amplification to ensure that audiences enjoy the full sonic impact of these soundtracks.

That creates an enormous challenge for enthusiasts seeking to duplicate that experience at home. The typical subwoofer designed for hi-fi music reproduction has neither the dynamic range capability nor the ability to reproduce very low frequencies at the sound levels needed to deliver the full cinema experience.

At Procella, our extensive professional cinema background informs our understanding of what is needed to produce that experience in home theaters. We use dual driver designs to increase efficiency and maximize output. We use only 15″, 18″ and 21″ drivers to ensure that our subwoofers can produce significant output at very low frequencies, unlike smaller subwoofers that simply can't keep up. Our sealed box designs ensure lightning quick transient response and enable that powerful extended low frequency response. Our largest subwoofer models utilize Procella's novel V-Loaded driver configuration. We even offer a small balancing subwoofer model that experienced calibrators can add to a Procella subwoofer package to smooth seat-to-seat variance in low frequency response.

With a Procella subwoofer, you'll hear (and feel) massive impact when the soundtrack calls for it. And when listening to music, you'll hear clarity and detail down to the lowest reaches of the kick drum and electric and double basses. Seven subwoofer models enable designs to fit any size theater and in any combination of (recommended) multiple subwoofer configurations.

#### Sealed box cabinets

- Flatter frequency response
- Extended low-frequency response
- Superior transient response
- Very low Group delay
- 'Tighter' Bass experience

# V-loaded driver configuration

- Low distortion
- improved transient response
- reduced cone excursion at high SPL



# P<sub>10</sub>Si

single 10 inch passive subwoofer

- Frequency response : 26Hz (-3dB)
- SPL @ 50Hz : 107dB/113dB (cont/max)
- Power Handling: 350W/1,000W (cont/max)
- 8 ohms nominal
- 10 inch long-throw driver with 65mm voice coil in 18 litre sealed box

Dimensions (HxWxD): 470 x 680 x 180mm

**ROOM SIZE**Balancing Sub



ROOM SIZE

Small to medium (2 or more)

# P15Si

single 15 inch passive subwoofer

- Frequency response : 22Hz (-3dB)
- SPL @ 50Hz : 113dB/119dB (cont/max)
- Power Handling : 600W/1,500W (cont/max)
- 8 ohms nominal
- 15 inch long-throw driver with 75mm voice coil in 51 litre sealed box

Dimensions (HxWxD): 570 x 480 x 280mm



# **P15A**

single 15 inch active subwoofer

- Frequency response : 24Hz (-3dB)
- SPL @ 50Hz : 113dB/119dB (cont/max)
- 350W Class D Amplifier
- Against wall / In corner
- 15 inch long-throw driver with 75mm voice coil in 55 litre sealed box
- Available in black and white

Dimensions (HxWxD): 505 x 700 x 245mm

#### **ROOM SIZE**

Small to medium (2 or more)



# P15

dual 15 inch passive subwoofer

- Frequency response : 22Hz (-3dB)
- SPL @ 50Hz : 119dB/123dB (cont/max)
- Power Handling: 2x 800W (cont)
  - 2x 1,600W (max)
- 8 ohms each nominal
- dual 15 inch long-throw driver with 75mm voice coil in 75 litre sealed box

Dimensions (HxWxD): 570 x 930 x 222mm

#### **ROOM SIZE**

Small - medium - large (2 or more)



P18
dual 18 inch passive subwoofer

Frequency response : 21Hz (-3dB)

• SPL @ 50Hz : 133dB/139dB (cont/max)

• Power Handling : 2x 1,200W (cont)

2x 3,000W (max)

8 ohms each nominal

dual 18 inch long-throw driver with
 102mm voice coil in 205 litre sealed box

Dimensions (HxWxD): 670 x 1050 x 300mm

**ROOM SIZE** medium - large



V18

dual 18 inch passive subwoofer

• Frequency response : 18Hz (-3dB)

• SPL @ 50Hz : 137dB/143dB (cont/max)

• Power Handling : 2x 1,200W (cont)

2x 3,000W (max)

• 8 ohms each nominal

Dual 18 inch long-throw driver with 102mm voice coil in 205 litre sealed box

Dimensions (HxWxD): 520 x 1050 x 670mm

ROOM SIZE



## **V21**

dual 21 inch passive subwoofer

Frequency response: 18Hz (-3dB)

• SPL @ 50Hz : 139dB/145dB (cont/max)

Power Handling : 2x 1,700W (cont)

2x 3,200W (max)

• 8 ohms each nominal

Dual 21 inch long-throw driver with
 114mm voice coil in 255 litre sealed box

Dimensions (HxWxD): 600 x 1050 x 670mm

**ROOM SIZE** medium - large

#### **Subwoofer Selection by Room Volume**

These are our minimum recommendations for subwoofers based on room volume. These recommendations are for subwoofers in rooms with a medium low frequency reverb time. Understand that these are guidelines, not precise specifications. Room construction, dimensions and acoustics vary considerably from room to room, making it difficult to reduce subwoofer selection to a simple formula. Experience counts.

The amount of low frequency loss, absorption and reverb in a given room can affect subwoofer requirements. Rooms with low reverb time and/or low frequency loss will need more subwoofers and rooms with long low frequency reverb times will have greater problems with standing waves and resonances. In general, the smaller the room, the more pronounced the problems.

We recommend use of multiple subwoofers when possible, with two or four properly placed subwoofers typically producing the best ratio of performance to cost. Subwoofer models may be mixed in a room.

	P15A	P15	P18   V18   V21
One subwoofer	up to 50m³	up to 100m³	up to 200m³
Two subwoofers	up to 100m <sup>3</sup>	up to 200m <sup>3</sup>	up to 400m³
Three subwoofers	up to 150m³	up to 300m³	up to 600m³
Four subwoofers	up to 300m³	up to 600m³	up to 1200m³

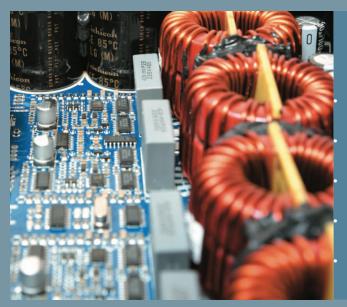
# Power amplifiers

Procella's new generation of DA power amplifiers, designed with Pascal A/S of Denmark, brings an even higher level of performance to Procella speaker systems. In single rack-unit height chassis, Procella's multiple high-efficiency class-D designs deliver extraordinary sound quality with enormous power reserves, producing utterly transparent sound, effortless dynamic range and robust low frequency impact.

Our DSP models have user-selectable presets to optimize the performance of all Procella loudspeakers and subwoofers. For the P610, P815 and P860 full-range speakers, the presets provide active crossovers and PEQ settings, with additional fine-tuning for common room placements including baffle walls.

The higher-powered subwoofer amplifiers ensure maximum dynamic range at low frequencies and provide model-specific EQ, with additional settings to optimize response for wall, corner and freestanding subwoofer placements.

For our passive main, surround and height speaker models, available presets optimize for wall or free standing placement. EQ settings are also available for all models when they are placed behind acoustically transparent screens.



#### **Benefits of Class D**

- Low power consumption
- High power density
- Smaller and lighter amplifiers
- Lower heat dissipation
- Lower operating temperature



4-channel power amplifier

#### **DA4280**

- 280 W x 4 at 4-8 ohms
- 140W x 4 at 16 ohms
- 25A peak output current
- Universal PFC Power Supply
- GPIO or Auto On/Off
- 20 Hz 20 kHz frequency response  $(+0/-0.25 \text{ dB } 8 \Omega \text{ load})$
- Temperature protection
- Overload protection
- 1U height, 19"
- Made with Pascal A/S in Denmark









# **HOME**

Loudspeakers designed for uncompromised immersive audio performance in the finest private cinemas, from 2 to 50 seats.

# **STUDIO**

Loudspeakers for recording and post, with transparent sound enabling creation of sound mixes that translate into all environments.





# **CINEMA**

A range of specially designed and engineered cinema loudspeakers for VIP rooms, luxury cinemas and multiplexes, ranging from 50 to 500+ seats.

# Procella Audio®

#### Contact us

contact@procella.audio

www.procella.audio

#### **EU SHOWROOM**

Harderwijk Netherlands contact for a visit

#### **US SHOWROOM**

Venice Beach
California
contact for a visit

#### Disclaimer

All product, product specifications and data are subject to change without notice.