

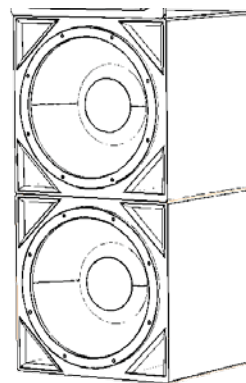
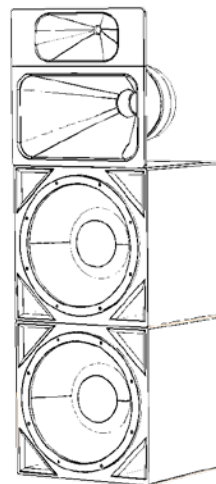
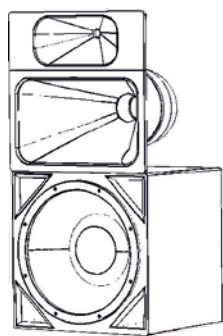
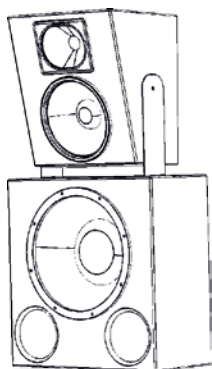
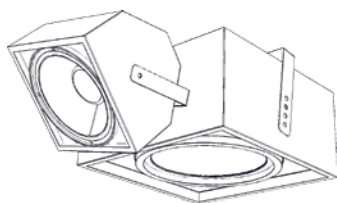
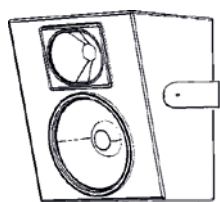


PROPHON

MADE IN SWEDEN SINCE 1985

Dolby
ATMOS

CINEMA SOLUTIONS 2021





PRESENTATION

We have supplied the professional cinema industry with high-end systems for 36 years, since the mid 80's . With a complete range of products in our portfolio for every need in todays demanding digital cinema theatre installations from small to large format, covering screen-speakers, surround speakers, LFE subwoofers, surround subwoofers, amplifiers, DSP-amplifiers, processors, and foajé sound.

Our focus when designing, developing and manufacturing cinema systems are low distortion levels, high sensitivity, reliability, headroom, longevity, high max SPL, timbre matching and coherent linear phase response.

To achieve all this we offer a complete concept including DSP processors with the latest in FIR algorithms, high-end amplifiers with PFC (Power Factor correction) universal power supplies, 5:th generationi SMPS, and we only assemble quality components in our speakers made in the EU from leading suppliers, in our factory in Stockholm, Sweden. This in combination with decades of experience in supplying the cinema installation industry, results in unsurpassed quality with truly amazing performance. We have different series in each product category to satisfy the demand in any cinema installation, regardless of budget, without compromise in quality.

PROPHON
SOUND SYSTEMS

Dolby
ATMOS

Most of our loudspeakers and amplifiers can be found in the DOLBY ATMOS DARDT database, for calculating, projecting and installing DOLBY ATMOS installations

INDEX

- 2) PRESENTATION
 - 3) CS1000 SERIES
 - 4) CS2000 SERIES
 - 5) CS3000 SERIES
 - 6) XD-SERIES
 - 7) C.L.A.M. SERIES
 - 8) CS500 SERIES
 - 9) CS700 SERIES
 - 10) CS5000 SERIES
 - 11) CS6000 SERIES
 - 12) P4DSP-SERIES
 - 13) P-SERIES
 - 14) PDSP-SERIES
 - 15) DSP-SERIES
 - 16) PMA SERIES
 - 17) Z8000
 - 17) VPS SERIES
 - 17) CSX-SERIES
 - 20 - 26) SUGGESTED SYSTEMS SETUPS AND DESIGNS, SMALL 7,1 TO LARGE DOLBY ATMOS
- CINEMA SCREEN SPEAKERS 2-WAY SMALL FORMAT
 - CINEMA SCREEN SPEAKERS 3-WAY SMALL TO MEDIUM FORMAT
 - CINEMA SCREEN SPEAKERS 3-WAY LARGE FORMAT
 - CINEMA SCREEN SPEAKERS REFERENCE SERIES 3-WAY AND 4-WAY LARGE FORMAT
 - CINEMA LINE ARRAY MODULE 3-WAY LINE SOURCE LARGE FORMAT
 - CINEMA SURROUND SPEAKERS, 2-WAY PASSIVE
 - CINEMA SURROUND SPEAKERS, 3-WAY BI-AMPLIFIED
 - CINEMA LFE SUBWOOFERS
 - CINEMA LFE SUBWOOFERS REFERENCE SERIES
 - 4 CHANNEL SYSTEM AMPLIFIERS WITH DSP
 - 4-8 CHANNEL SYSTEM AMPLIFIERS WITHOUT DSP
 - SYSTEM AMPLIFIERS WITH DSP, FIR, NETWORK, DANTE, DATABASE, WEBSERVER
 - SYSTEM DSP PROCESSORS 4/8, 8/8 16/16 CHANNELS
 - FOAJÉ MIXERAMPLIFIERS AND ZONE MIXERAMPLIFIERS
 - ZONE MATRIX MIXER FOR MULTI ZONE SIGNAL DISTRIBUTION
 - FOAJÉ WALLMOUNT SPEAKERS
 - FOAJÉ CEILING SPEAKERS



CS1000 SERIES

2-way Cinema screen speakers for small format

The CS1000 series was designed for small format cinema theatres, passive design using only one amplifier channel, the speakers in the series are compact yet powerful, for full frequency response, the HF is adjustable vertically and horizontally for precise aim. Shallow design allows for installation where there is limited space behind the screen as is often the case in small format cinema installations.

The horn is designed with an asymmetrical dispersion pattern, where the horizontal dispersion is wider downwards compared to on axis, resulting in more even SPL distribution in the theatre with very controlled directivity.

There are four models in the series to encompass all small sized cinema theatres.



Dolby
ATMOS

HIGHLIGHTS

- 4 models
- 2-way passive design with dedicated crossover
- Full frequency response
- Uses only one amplifier channel
- Shallow depth for fitting behind screen
- Asymmetrical horns for optimal SPL directivity
- Aimable HF horns vertically and horizontally

	CS1101	CS1121	CS1151	CS1251
DESIGN	2-way passive L, C, R screen speaker, tuned front-loaded bassreflex			
COMPONENTS	LF: 2 x 10" MF/HF: 1" hornloaded	LF: 2 x 12" MF/HF: 1" hornloaded	LF: 1 x 15" MF/HF: 1" hornloaded	LF: 2 x 15" MF/HF: 1" hornloaded
SENSITIVITY 2Pi	103dB 1W/1m.	104 dB 1W/1m.	102 dB 1W/1m.	105dB 1W/1m.
FREQ. RANGE(-6dB)	55 Hz - 19kHz	50Hz - 19kHz	45Hz - 19kHz	40Hz - 19kHz
NOMINAL IMPEDANCE	LF: 8 Ω, HF 8 Ω	LF: 4 Ω, HF 8 Ω	LF: 8 Ω, HF 8 Ω	LF: 4 Ω, HF 8 Ω
NOMINAL COVERAGE	H90 x V60 asymmetrical	H90 x V60 asymmetrical	H90 x V60 asymmetrical	H90 x V60 asymmetrical
INPUT	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew
POWER HANDLING RMS	500W	600W	550W	1100W
POWER HANDLING CONT.	1000W	1200W	1100W	2200W
MAX SPL CONT. (peak 2pi)	133dB @ 1m.	134,5@ 1m.	132dB @ 1m.	138,5dB @ 1m.



CS2000 SERIES

3-way Cinema screen speakers small to medium format

The CS2000 series was designed for small format cinema theatres in need of 3-way systems, the CS2000 series are run in bi-amplified mode with a passive dedicated crossover for MF/HF, and active crossover for LF/MF, using two amplifier channels in total, also available as tri-amplified, with dedicated amplifier channels for each of the three components.

The speakers in the series are compact yet powerful, for full frequency response, the MF/HF is adjustable vertically and horizontally for precise aim. With dedicated LF woofer the MF does not need to reproduce the lowest frequencies, allowing for better optimization in the MF frequencies.

Shallow design allows for installation where there is limited space behind the screen. There are four models in the series to encompass all small to medium sized cinema theatres.



HIGHLIGHTS

- 4 models
- 3-way bi-amplified design with dedicated passive crossover for the MF/HF, or 3-way tri-amplified.
- Uses only two amplifier channels (bi-amplified versions)
- Shallow depth for fitting behind screen
- Special horns for optimal SPL directivity
- Adjustable MF/HF vertically and horizontally.
- Extended LF frequency response compared to 2-way
- Timbre matching technology



CS21511

CS23011

CS21512

CS23012

DESIGN	3-way bi-amplified, passive MF/HF, L,C, R screen speaker, tuned front-loaded bassreflex			
COMPONENTS	LF: 1 x 15" MF/HF: 10"/1" horn	LF: 2 x 15" MF/HF: 10"/1" horn	LF: 1 x 15" MF/HF: 12"/1" horn	LF: 2 x 15" MF/HF: 12"/1" horn
SENSITIVITY	103dB 1W/1m.	103 dB 1W/1m.	103 dB 1W/1m.	103dB 1W/1m.
FREQ. RANGE(-6dB)	45 Hz - 19kHz	35Hz - 19kHz	45Hz - 19kHz	35Hz - 19kHz
NOMINAL IMPEDANCE	LF: 8 Ω, MF/HF 8 Ω	LF: 4 Ω, MF/HF 8 Ω	LF: 8 Ω, MF/HF 8 Ω	LF: 4 Ω, MF/HF 8 Ω
NOMINAL COVERAGE	H90 x V60	H90 x V60	H90 x V60	H90 x V60
INPUT	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew
POWER HANDLING RMS	LF: 550W, MF/HF: 250W	LF: 1100W, MF/HF: 250W	LF: 550W, MF/HF: 400W	LF: 1100W, MF/HF: 400W
POWER HANDLING CONT.	LF: 1100W, MF/HF: 500W	LF: 2200W, MF/HF: 500W	LF: 1100W, MF/HF: 800W	LF: 2200W, MF/HF: 800W
MAX SPL CONT. (peak 2pi)	137,5dB @ 1m.	140@ 1m.	139dB @ 1m.	141dB @ 1m.

CS3000 SERIES

3-way hornloaded Cinema screen speakers for large format

The CS3000-SERIES large format cinema screen speakers was designed for high power three- way bi-amplified and tri-amplified reproduction, with unsurpassed sensitivity, clarity, directivity, phase coherency, power handling and max SPL.

With hornloaded midrange and highrange design for optimal directivity, and 15" LF with front-loaded tuned bassreflex design for high power low frequency emission.

Available bi-amplified with a dedicated passive crossover network handling MF/HF needing only two amplifier channels, and in tri-amplified version where each component has a dedicated DSP-controlled amplifier channel, using three channels in total.

The CS3000-series comes in four models to encompass the need in medium to large format auditorium installations.

The MF/HF module is aimable for aligning the speakers depending on need.



HIGHLIGHTS

- 4 models
- 3-way bi-amplified design with dedicated passive crossover for the MF/HF
- 3-way tri-amplified versions with dedicated DSP-controlled amplifier channels for each LF/MF/HF
- Bi-amplified versions uses only two amplifier channels
- Hornloaded midrange for directivity control, high sensitivity and and long-throw
- specially designed horns for optimal SPL directivity
- Adjustable MF/HF vertically and horizontally.
- Very high max SPL,
- Controlled directivity
- Low distortion levels

	CS31511	CS33011	CS31512	CS33012
DESIGN	3-way bi-amplified, hornloaded, passive MF/HF, L,C, R screen speaker, tuned front-loaded bassreflex			
COMPONENTS	LF: 1 x 15" MF: 8" hornloaded HF: 1" horn	LF: 2 x 15" MF: 8" hornloaded HF: 1" horn	LF: 2 x 15" MF: 10" hornloaded HF: 1" horn	LF: 2 x 15" MF: 10" hornloaded HF: 2" horn
SENSITIVITY	LF: 103dB 1W/1m. MF/HF: 105dB 1W/1m.	LF: 106dB 1W/1m. MF/HF: 105dB 1W/1m.	LF: 106dB 1W/1m. MF/HF: 106dB 1W/1m.	LF: 106dB 1W/1m. MF/HF: 106dB 1W/1m.
FREQ. RANGE(-6dB)	45Hz - 19kHz	40Hz - 19kHz	45Hz - 19kHz	40Hz - 19kHz
NOMINAL IMPEDANCE	LF: 8 Ω, MF/HF 8 Ω	LF: 4 Ω, MF/HF 8 Ω	LF: 4 Ω, MF/HF 8 Ω	LF: 4 Ω, MF/HF 8 Ω
NOMINAL COVERAGE	H90 x V60	H90 x V60	H90 x V60	H90 x V60
INPUT	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew
POWER HANDLING RMS	LF: 550W, MF/HF: 250W	LF: 1100W, MF/HF: 250W	LF: 1100W, MF/HF: 400W	LF: 1100W, MF/HF: 400W
POWER HANDLING CONT.	LF: 1100W, MF/HF: 500W	LF: 2200W, MF/HF: 500W	LF: 220W, MF/HF: 800W	LF: 2200W, MF/HF: 800W
MAX SPL CONT. (peak 2pi)	137,5dB @ 1m.	143,5dB @ 1m.	143,5dB @ 1m.	143,5dB @ 1m.



REFERENCE SERIES

3-way and 4-way high power hornloaded
Cinema screen speakers for large format

The XD system is a high power 3-way and 4-way series of cinema screen speakers for large format auditoriums where there can be no compromises. Bi-amplified, Tri-amplified and Quad-amplified systems with asymmetrical horns, very high max SPL, extremely low distortion levels and massive power-handling. The XD system is a module system that can be installed standard behind-screen but also flown above screen. Unpunched screens and LED-screens are coming on strong in the industry with many advantages in visuals, but also introducing a conundrum for how to solve the audio issue. We have designed this system to also be flown above screen, solving the issue with unpunched screens and LED screens. There are integrated hardware and flightwares for easy installation and setup.



XD-series can be flown horizontally above screen



HIGHLIGHTS

- 3-way and 4-way hornloaded high power
- Bi- tri- and quad- amplified options
- Asymmetrical horns for linear dispersion
- Can be installed behind screen vertical
- Can be installed flown above screen horizontal
- Very high max SPL and power handling
- Designed for large format high end installations
- DSP-controlled with advanced FIR coefficients
- Integrated hardware for aiming and flying
- Time coherent linear HF/VHF coaxial ring radiator design (XD111)
- LF, MF/HF and MF/HF/VHF modules can be combined into a system that suits each installation

	XD123	XD223	XD224	XD115	XD215
DESIGN	3-way bi/tri amplified screen speaker	3-way bi/tri amplified screen speaker	4-way, tri/quad amplified LF/ MF/HF/VHF module with coaxial ring radiator HF/VHF	Front-loaded tuned bas-reflex LF for optimal low frequency emissions and for Surround sub	
COMPONENTS	LF: 1 x 15" MF: 1 x 10" on horn HF: 1" on horn	LF: 2 x 15" MF: 1 x 10" on horn HF: 1" on horn	LF: 2 x 15" MF: 10" on horn HF: 4,5" driver on horn VHF: 1" driver on horn	LF: 1x 15" with 4" VC	LF: 2 x 15" with 4" VC
SENSITIVITY (1W/1m.) 2Pi	LF: 102dB MF: 103dB HF: 103dB	LF: 105dB MF: 103dB HF: 103dB	LF: 105, MF: 103dB HF/VHF: 111dB	103dB	106 dB
FREQ. RANGE(-6dB)	40Hz - 19kHz	40Hz - 19kHz	200Hz - 19kHz	35Hz - 300Hz	35Hz - 300Hz
NOMINAL IMPEDANCE	LF: 8 Ω MF: 8 Ω / HF 8 Ω	LF: 4 Ω MF: 8 Ω / HF 8 Ω	LF: 4Ω / MF: 8Ω HF 8Ω / VHF 8Ω	8 Ω	4 Ω
NOMINAL COVERAGE	H90 x V60 asymmetrical	H90 x V60 asymmetrical	H90 x V60 asymmetrical	-	-
INPUT	Speakon or polescrew				
POWER HANDLING RMS	LF: 550W, MF/HF: 400W	LF: 1100W, MF/HF: 400W	LF: 1100, MF: 300W, HF/VHF: 110W	600W,	1200W
POWER HANDLING CONT.	LF: 1100W, /MF/HF: 800W	LF: 2200W, MF/HF: 800W	LF2200, MF: 600W, HF/VHF: 220W	1200W	2400W
MAX SPL. (peak 2pi)	139dB @ 1m.	142dB @ 1m.	142dB @ 1m.	140 @ 1m.	143dB @ 1m.



C.L.A.M SERIES

Cinema Line Array Module, 3-way line source

The C.L.A.M. system was mainly designed for architecturally challanging installations in large format cinema auditoriums, often where there are very steep angle of the seats, or where balcony or several floors must be reached.

The line source technology features many advantages compared to standard point-source or horn technology applied in almost all cinema installations, in a true line source system the loss over distance is only -3 dB for each doubling of distance, compared to standard cinema speakers such as horn and point-source, where there is a typical loss of -6 dB for each doubling of distance.

As comparison, a point-source system with 100dB sensitivity @1W, 1m. will have a SPL of 76 dB at 12 m., whilst a line source system with 100dB sensitivity @ 1W/1m. will have a SPL of 88 dB. at 12 m. and at 24 m. the difference will be 70dB compared to 85 dB, a 15dB difference, with the same output.

The C.L.A.M. line source module consists of two 10" woofer reproducing MF, and four 1" drivers mounted on waveguides and horns handling HF, with one or several high power 15" woofers handling LF depending on number of C.L.A.M. modules in the array.

Each module has a H110 x V15 degree dispersion, where each module handle a fixed amount of rows, and where each module is independantly adjustable to match room acoustics. Using the advanced 3D acoustic calculation software EASE for prediction and simulation before installation ensures a perfect result.



HIGHLIGHTS

- Line source technology
- Designed for large format
- Perfect for acoustically challanging installations
- Can be stacked or flown depending on need
- Integrated hardwares with external connection plates
- Very controled dispersion pattern
- -3dB loss for each doubling of distance compared to point-source with -6dB loss for each doubling of distance
- Module system for adaptable setup

	CLAM21041	CLAM115	CLAM215	CLAM315
DESIGN	2-way passive line source module	LF woofer, front-loaded tuned bassreflex	LF woofer, front-loaded tuned bassreflex	LF woofer, front-loaded tuned bassreflex
COMPONENTS	MF: 2 x 10" HF: 4 x 1" mounted on wave-guide and horn	LF: 1x 15" with 4" VC	LF: 2 x 15" with 4" VC	LF: 3 x 15" with 4" VC
SENSITIVITY (2pi)	103dB 1W/1m.	103dB 1W/1m.	106 dB 1W/1m.	107,5 dB 1W/1m.
FREQ. RANGE(-6dB)	90 Hz - 19kHz	35Hz - 300Hz	35Hz - 300Hz	35Hz - 300Hz
NOMINAL IMPEDANCE	4 ohm	8 ohm	4 ohm	2,6 ohm
NOMINAL COVERAGE	V110 x H15	-	-	-
INPUT	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew
POWER HANDLING RMS	700W	600W,	1200W	1800W
POWER HANDLING CONT.	1400W	1200W	2400W	3600W
MAX SPL. (peak 2pi)	137,5dB @ 1m.	140@ 1m.	143dB @ 1m.	144,5 @ 1m.



CS500 SERIES

Cinema surround speakers

The CS500-series high power cinema surround speakers was designed for fullrange frequency reproduction for an immersive experience in each cinema auditorium, from small to large format cinema theatres. Using a specially designed horn with dispersion of 80 x 60, each surround speaker has a very controlled directivity.

the baffel has an downwards angle of 15 degree for precise aiming. There are four models in the series, three 2-way passive speakers and one 3-way bi-amplified speaker, mainly designed for ATMOS installations and high end installations where a 3-way surround speaker is preferable. Using timbre matching techniques enables a seamless transition between screen speakers and surround speakers. Each surround speaker in the 500-series features high sensitivity, low distortion levels, high max SPL and fullrange flat frequency responce.



HIGHLIGHTS

- 5 models
- 2-way passive design with deticated passive crossover
- 15° baffel-angle for precise aiming
- Integrated mounting hardware in the back
- Installation bracket avaiable
- High sensitivity, low distortion, high max SPL
- discreete design
- Fully covering foam with minimum airflow resistance
- Timbre matching



	CS538	CS548	CS558	CS568	CS578
DESIGN	2-way passive cinema surround speaker, front.loaded tuned bassreflex on 15° baffel				
COMPONENTS	LF: 1 x 8" MF/HF: 1" horn	LF: 1 x 10" MF/HF: 1" horn	LF: 1 x 12" MF/HF: 1" horn	LF: 1 x 12" MF/HF: 2" horn	LF: 1 x 15" MF/HF: 2" horn
SENSITIVITY 1W/1m. 2Pi	98 dB	99 dB	101 dB	101 dB	102,5
FREQ. RANGE(-6dB)	55 Hz - 19kHz	50Hz - 19kHz	47Hz - 19kHz	47Hz - 18kHz	40Hz - 18kHz
NOMINAL IMPEDANCE	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω
NOMINAL COVERAGE	H90 x V60	H90 x V60	H90 x V60	80x80	90x60
INPUT CONNECTOR	Polescrew binding terminals +(positive) RED / - (negative) BLACK				
POWER HANDLING RMS	120W	150W	300W	350W	500W
POWER HANDLING CONT.	240W	300W	600W	700W	1000W
MAX SPL. (peak 2pi)	125dB	126,5dB	131,5dB	132,5dB	135,5dB



CS700 SERIES

3-way Cinema surround reference speakers

The CS700-Series 3-way high performance surround speakers was designed for high-end cinema installation where design, performance, frequency response and max SPL are essential for an immersive experience, and where a no-compromise approach is applied for the best performance.

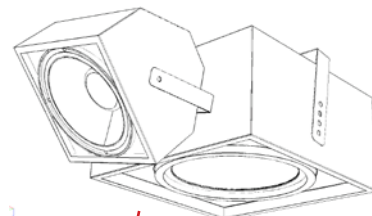
Manufactured with the very best components available for a result beyond most surround speakers.

Furthermore, the CS768 is housed in two separate cabinets for ceiling mounting, where the MF/HF cabinet is aimable and the LF cabinet is extra shallow, to allow for closed ceiling mounting with bracket.

For space-saving and phase aligning, the HF is mounted coaxially on the MF-driver, with a 70° x 70° or 100° x 100° horn for a controlled directivity.

HIGHLIGHTS

- 3 models
- 3-way high-power bi-amplified with passive crossover for MF/HF
- 15° baffle angle for precise aiming (not CS768)
- Integrated mounting hardware in the back
- 70° x 70° - 100° x 100° controlled dispersion
- High sensitivity, low distortion, high max SPL
- discrete and visually appealing design
- Fully covering foam with minimum airflow resistance
- Timbre matching
- CS768 features aimable MF/HF, for ceiling mounting in ATMOS



The CS768(X) was designed for tight ceiling-mount with aimable MF/HF, to be installed in ATMOS cinemas

	CS748	CS758	CS768(X)
DESIGN	3-way cinema surround speaker bi-amplified, with coaxially mounted HF	3-way cinema surround speaker bi-amplified, with coaxially mounted HF	3-way cinema surround speaker bi-amplified, (X) with separate aimable cabinet for MF/HF coaxially mounted
COMPONENTS	LF: 12" MF: 6,5" HF: 1" on horn	LF: 12" MF: 8,5" HF: 1" on horn	LF: 15" MF: 8,5" HF: 1" on horn
SENSITIVITY 1W/1m. (2Pi)	LF: 100dB, MF/HF: 95dB	LF: 103dB, MF/HF: 100dB	LF: 102,5dB, MF/HF: 100dB
FREQ. RANGE(-6dB)	47Hz - 19kHz	47Hz - 19kHz	40Hz - 19kHz
NOMINAL IMPEDANCE	LF: 8 Ω, MF/HF 8 Ω	LF: 8 Ω, MF/HF 8 Ω	LF: 8 Ω, MF/HF 8 Ω
NOMINAL COVERAGE	70° x 70°	100° x 100°	100° x 100°
INPUT	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew
POWER HANDLING RMS	LF: 450W, MF/HF: 175W	LF: 450W, MF/HF: 300W	LF: 500W, MF/HF: 300W
POWER HANDLING CONT.	LF: 900W, MF/HF: 350W	LF: 900W, MF/HF: 600W	LF: 1000W, MF/HF: 600W
MAX SPL. (peak 2pi) @ 1m.	130 dB	135dB	135,5dB @ 1m.



CS5000 SERIES

Cinema LFE- HP subwoofers

When it comes to LFE, low frequency high power reproduction for cinema installations, the design, manufacturing process and choice of components are crucial! a LFE subwoofer must be able to reproduce very high SPL with extremely low distortion levels. In todays digital era, the subwoofers must be able to reproduce a wide frequency range down to the lowest infra spectrum.

Our subwoofers are heavily braced, manufactured with 19mm. Medium Density Fibreboard, with tuned front-loaded bassreflex for accurate low frequency emission.

We have designed the subwoofers as shallow as possible to allow for behind screen installation where there is limited space.

The woofers used is of the highest quality made in the EU, with high sensitivity, high power handling, high max SPL and low distortion levels, resulting in LFE subwoofers with truly astounding specifications and performance.



Dolby
ATMOS

HIGHLIGHTS

- 4 models
- Very low tuning for high power infra reproduction
- Shallow depth for tight behind-screen installations
- Front-loaded tuned bassreflex for optimum response
- Heavily braced Medium density fibreboard cabinet
- High end woofers made in the EU
- Very high sensitivity, power handling and max SPL
- Low distortion levels
- 18" woofers features 4" voice coils
- 21" woofers features 4,5" voice coils

	CS5118	CS5218	CS5121	CS5221
DESIGN	Heavily braced tuned front-loaded bassreflex, extended low frequency LFE cinema subwoofers and surround sub			
COMPONENTS	1 x 18"	2 x 18"	1 x 21"	2 x 21"
SENSITIVITY (2Pi)	102dB 1W/1m.	105 dB 1W/1m.	100 dB 1W/1m.	103dB 1W/1m.
FREQ. RANGE(-3dB)	30Hz - 300Hz	30Hz - 300Hz	25Hz - 150Hz	25Hz - 150Hz
NOMINAL IMPEDANCE	8Ω	4Ω or 2 x 8Ω	4Ω (8Ω on request)	2Ω or 2x4Ω (4Ω or 2x8 Ω on request)
VOICE COIL DIAMETER	4" (100mm.)	4" (100mm.)	4,5" (116 mm.)	4,5" (116 mm.)
INPUT	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew
POWER HANDLING RMS	600W	1200W	1700W	3400W
POWER HANDLING CONT.	1200W	2400W	3400W	6800W
MAX SPL. (peak)	135,5dB @ 1m.	142@ 1m.	137,5dB @ 1m.	144dB @ 1m.
DIMENSIONS	W520 x H700 x D350	W600 x H1200 x D500	W600 x H800 x D600	W600 x H1200 x D600
RECOMMENDED AMPLIFIER POWER	>1500W	>3000W (2x1500)	>4000W	>8000W (2x4000W)



CS6000 SERIES

Cinema LFE- VHP subwoofers

The CS6000-series is the pinnacle of LFE low frequency emission in cinema auditoriums, with the next evolution in subwoofers. With a new longer four layer, split aluminum voice coil, resulting in higher sensitivity, lower distortion, longer Xmax, higher power handling, more gap-energy. With the basket functioning as heatsinks, with ventilation in the neodymium magnet for heat dissipation.

The cones are reinforced for endless hours of high SPL performance, with massive Neodymium magnet for an extreme BL factor. Designed for premium high end cinema auditoriums where performance, SPL and LFE reproductions is essential without compromise.



HIGHLIGHTS

- 4 models
- Very low tuning for high power infra reproduction
- Front-loaded tuned bassreflex for optimum response
- Heavily braced Medium density fibreboard cabinet
- High-end woofers made in the EU
- Very high sensitivity, power handling and max SPL
- Low distortion levels
- Four layer, split aluminum VC,
- Heatsink incorporated in gasket
- 18" woofers with 4,5" voice coils
- 21" woofers with 6" voice coils
- Dual subs available as single amp or bi-amped
- Dual subs available in 2, 4, 8, ohm

	CS6118	CS6218	CS6121	CS6221
DESIGN	Heavily braced tuned front-loaded bassreflex, extended low frequency			
COMPONENTS	1 x 18"	2 x 18"	1 x 21"	2 x 21"
SENSITIVITY	101B 1W/1m.	104dB 1W/1m.	99 dB 1W/1m.	102dB 1W/1m.
FREQ. RANGE(-3dB)	30 Hz - 300Hz	30Hz - 300Hz	25 Hz - 150Hz	25Hz - 150Hz
NOMINAL IMPEDANCE	8Ω	4Ω or 2 x 8Ω	4Ω	2 x 4Ω or 1 x 2Ω
VOICE COIL DIAMETER	4,5" (100mm.)	4,5" (100mm.)	6" (150 mm.)	6" (150 mm.)
INPUT	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew	Speakon or polescrew
POWER HANDLING RMS	1700W	3400W	2000W	4000W
POWER HANDLING CONT.	3400W	6800W	4000W	8000W
MAX SPL. (peak)	138,5dB @ 1m.	144@ 1m.	138dB @ 1m.	144dB @ 1m.
DIMENSIONS	W550 x H730 x D550	W600 x H1200 x D550	W600 x H800 x D600	W600 x H1200 x D600
RECOMMENDED AMPLIFIER POWER	>4000W	>7000W or 2x3500W	>5000W	>10000W or 2x5000W



P4DSP SERIES

SYSTEM AMPLIFIERS WITH DSP



DSP controlled 4-channel system amplifiers, three models from 4x350W to 4 x 2600W.

With high-end DSP processors. Networked with GUI software. Each input features 6 EQ points, delay, gain, each output features 7 EQ points, HP-filter and Lo-pass filter 12-48dB/oct. Limiter, Delay, phase. all prophon cinema speakers available for download.

Compact size of 1RU 19" allows for tight rackmounting.

Available with XLR and Speakon, or Phoenix connectors. Front panel with display and programming buttons for access, load, store and programming without computer and GUI software.

HIGHLIGHTS

- 3 models 4 four channels
- 4x350W to 4x2600W
- Built in DSP with delay, EQ, HP/LP-filter
- Presets for all speakers
- Only 1 RU in height allows for tight rackmounting
- Light weight SMPS PDU
- 100-240VAC wide mains input
- AES input option
- Networked GUI software
- Display with buttons for acces on frontpanel



	P426DSP	P418DSP	P4260DSP
DESIGN	4 channel System amplifier with DSP, AES		
Power 8 ohm	4 x 350W	4 x 800W	4 x 1300W
Power 4 ohm	4 x 500W	4 x 1500W	4 x 2400W
Power 2 ohm	4 x 600W	4 x 1800W	4 x 2600W
FREQUENCY RESPONCE CROSS TALK	20Hz - 20kHz >75dB		
S/N (20Hz - 20kHz A-Weighted @ 8 ohm	Typical < -105 dB		
DAMPING FACTOR SLEW RATE	> 800 @ 20Hz - 20kHz 50V/us		
THD+N 1/2 Power	0,3% (typical < 0,1%) 0,1% (typical < 0,05%)		
MAINS POWER	PowerCon 16A / regulated SMPS, 100-240VAC, 50-60Hz		
CONNECTORS	4 x XLR analogue / 2 x AES female input, 4 x Speakon output, 1 x RJ485 ethernet connectors, (available with phoenix connectors)		
DSP	4 input, 4 output analogue, 2 AES pairs input. 96kHz / 32 bit, 6 EQ on each input channels, 8 EQ on each output channel incl High-shelf and low-shelf Crossover on each output 12-48dB, Linkwitz-Riley, Butterworth, Bessel. Compressor 3, 6, 12 dB		
SCREEN / CONTROLS	LCD / 4 digital rotary encoders, 5 push select butons		
DIMENSIONS	483 x 390 x 45	483 x 445 x 45	483 x 445 x 45
WEIGHT	8 kg. net / 10 kg. shipping	10 kg. net / 12 kg. shipping	11 kg. net / 13kg. shipping



P SERIES

SYSTEM AMPLIFIERS WITHOUT DSP



HIGHLIGHTS

- 3 models
- 4 channels, 6 channels, 8 channels
- 4x700W, 2x1350W to 6x450W & 8x250W
- Only 1 RU in height allows for tight rackmounting
- Light weight SMPS PDU
- 220-240VAC mains input
- Designed for cinema installations

The P-series is a series of amplifiers without DSP for installation in cinema environment, all models housed in a 1RU 19" chassis for space-saving rackmounting. With 4, 6 and 8 channel versions designed for surround speakers, screen speakers and subwoofers, with 4x350W, 4x700W, 2x1350W, 6x450W to 8x250W. Phoenix connectors in the back allows for quick and easy assembly and connections. The P-series offers proven and reliable technology, Each amplifier can be bridged for more power allocated to fewer channels for subwoofers etc.



P4700

P6450

P8250

Power 8 / 4 / 2 ohm	4 x 350W / 500W / 700W	6 x 250W / 450W / NA	8 x 150W / 250W / NA
Power BTL 8 ohm	2 x 900W	3 x 800W	4 x 500W
Power BTL 4 ohm	2 x 1350W	3 x 1350W	-
FREQUENCY RESPONSE CROSS TALK	20Hz - 20kHz >75dB		
S/N (20Hz - 20kHz A-Weighted @ 8 ohm	Typical >-80dB		
DAMPING FACTOR SLEW RATE	> 500 @ 20Hz - 20kHz 50V/us		
THD+N 1/2 Power	0,3% (typical < 0,1%) 0,1% (typical < 0,05%)		
MAINS POWER	PowerCon 16A / SMPS, 230VAC, 50-60Hz		
CONNECTORS	Phoenix connectors 3-pin balanced input and 2 pin speaker output / each channel		
DIMENSIONS WxDxH (cm.)	483 x 355 x 45	483 x 355 x 45	483 x 355 x 45
WEIGHT	5,5 kg. net / 7,5 kg. shipping	5,5 kg. net / 7,5 kg. shipping	5,5 kg. net / 7,5kg. shipping



PDSP SERIES

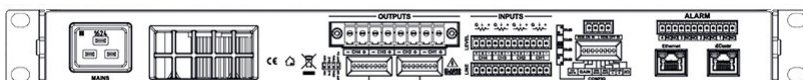
SYSTEM AMPLIFIERS WITH DSP, FIR, DANTE



The PDSP-series are the pinnacle of system amplifiers, four channel DSP amplifiers with advanced FIR-filter for linear phase and amplitude coefficients, AES input, DANTE, networking, WiFi, web-server for control system. With built-in control system for using tablets and I-pads as control panels where presets, mute, gain and EQ can be set up in a user friendly GUI where the integrator/installer easily can design the GUI with drag and drop functions for creating a menu-system custom with the functions needed. There are an abundance of possibilities for controlling, monitoring and connect to external control systems for integrating into larger automated systems.

HIGHLIGHTS

- FIR filters for perfect linear and phase coherency
- 4 models with 4x300W to 4x2400W
- Built in DSP with delay, EQ, HP/LP-filter
- DANTE 4x4
- Only 1 RU in height allows for tight rackmounting
- Light weight SMPS PDU
- 90-264VAC wide mains input
- AES input option
- Networked GUI software
- All prophon cinema speakers in the database
- WiFi and Ethernet for monitoring and controlling
- Built in control system for external GUI menu in tablets, I-pads etc.
- Accepts most external control softwares in the market
- Magnetic front panels for easy service.



	P4300DSP	P4800DSP	P41200DSP	P42400DSP
DESIGN	High power system amplifiers with FIR, AES, DANTE, DSP, network, WiFi, webserver, control system			
Power 8 ohm	4 x 300W	4 x 600W	4 x 1200W	4 x 1600W
Power 4 ohm	4 x 400W	4 x 600W	4 x 1200W	4 x 2400W
Power 2 ohm	4 x 400W	4 x 800W	4 x 150W	4 x 1800W
Power bridge BTL 8/4 ohm	2 x 600W / 800W	2 x 1200W/1600W	2 x 2400W/3000W	2 x 4800W/3600W
CONNECTORS	Phoenix connectors in/out, RJ485 DANTE, Ethernet			
DSP	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass, linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR), TruePower™, RMS voltage, RMS current, Peak limiter, Active DampingControl™ and LiveImpedance™ measurement, 2.5 ms fixed latency architecture, AD converters 24 Bit Tandem™ @ 48 kHz 125 dB-A Dynamic Range - 0.005 % THD+N, DA converters 24 Bit Tandem™ @ 48 kHz 117 dB-A Dynamic Range - 0.003 % THD+N, Sample rate converter 24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N, Internal precision 32 bit floating point			
DIMENSIONS WxDxH	483 x 358 x 44,5			



DSP SERIES

SYSTEM DSP PROCESSORS

The DSP series features three models of DSP processors for handling signal flow, matrix, EQ, delay, HP-filter, LP-filter, Limiter from 4 in / 8 out, to 16 in / 16 out, depending on what system is installed, where external sources can be added into the system and distributed freely to output channels.

HIGHLIGHTS

- 3 models 4/8, 8/8, 16/16
- 31 band EQ + 7 EQ points on each channel
- DANTE optional
- Phoenix connectors
- 96kHz / 32bit DSP
- High-end AD/DA converters
- GUI, Networked



GUI - Graphic Utility Interface software

	DSP480	DSP880	DSP1616
DESIGN	DSP SYSTEM PROCESSORS		
INPUT CHANNELS	4	8	16
OUTOUT CHANNELS	8	8	16
INPUT EQ	7 EQ POINTS ON EACH INPUT CHANNEL		
OUTPUT EQ	7 EQ POINTS ON EACH OUTPUT + 31 BAND EQ ON EACH OUTPUT		
SAMPLING RATE	96kHz		
BITRATE	32 bit		
DELAY	2S on each input and output		
CROSSOVER TYPES	Linkqitz-Riley, Bessel, Butterworth		
CROSSOVER SLOPES	6-48dB/oct		
LIMITER	Attack, Threshold, decay, hold		
GUI	Yes, PC software		
DANTE	Optional		



FOAJÉ SOUND

COMPLETE SOLUTIONS FOR PUBLIC ADDRESS

A cinema does not only need sound in each auditorium, in the foajé there is need for background music, cinema trailers, announcements, etc. We offer a complete range of products for foajé sound, with zonemixer amplifiers, architectural compact installation speakers for wallmount, discrete in-ceiling speakers, zone controls, announcements microphones, Hi-Z and Lo-Z solutions for small to large foajé and public area installations, with the possibility for zones with individual control of source, volume and sound.



PMA350 - MIXER AMPLIFIER 350W

The PMA350 is a mixer amplifier with 350W. distribution via 70V/100V Hi-Z or 4-16ohm Lo-Z. With 3 x balanced mono line/mick in and 2 x unbalanced stereo in for up to 5 sources, with separate volume controls for each source and bass/treble for master out. With built-in media-player MP3-player via USB or SD, and bluetooth, the PMA350 is a simple to use mixer amplifier with many features and functions, if used in 100V, 35 speakers set to 10W/100V can be used, or 70 speakers set to 5W/100V, or 17 speakers with 20W/100V, depending on SPL and distribution needed.



PMA4240D - ZONE MIXER AMPLIFIER 4x240W

The PMA4240 is a zone mixer amplifier with 4 x 240W amplifiers for powering up to 4 individual zones, with built-in media player with MP3-player via USB and SD, and bluetooth, PMA4240 also features 6 source input, where each source can be routed freely to any or all output zones, with separate gain and bass/treble controls, each zone out also features a line out for connecting additional amplifiers or to connect to other products for distribution of signals. All programming, media player control, settings and routing is made in the color display, with the programming rotary encoder.

The amplifier can power Hi-Z 100V/70V and Lo-Z 4-16 ohm. The PMA4240 is usually enough top power all common areas a large format multiplex cinema, there are external wall panels for zone control, and an announcement mic for addressing zones 1-4 and all call.





PZM8000 - 8x8 ZONE MATRIX

Designed for larger cinema complex with up to 8 sources distributed to 8 zones (can be combined into a 8 in / 32 out zone matrix) where each output zone can use any source with total freedom in signal routing, Furthermore there are three different external wall panels connected via RJ485 where source and volume can be adjusted and selected, and two of the panels also host local inputs, with stereo RCA input and XLR mick input, or two pcs. XLR input, each with dedicated gain control for each local input. The zone announcement microphone is a gooseneck microphone with table top design, where each zone can be addressed separately or together with other zones by choice.



VPS-SERIES - WALLMOUNT SPEAKERS

The VPS-series was designed for high-end architectural installations in public address. The design is two-way passive wall-mount speakers with a switch for selecting 8 ohm or 100V with different power taps, for both Lo-Z and Hi-Z operation.

There are three different sizes available in black and white,

VPS502 with 5"/0,75" dome tweeter,

VPS602 with 6,5"/1" dome tweeter,

VPS802 with 8"/1,5" dome tweeter.

They are easy to install with the included brackets, several different optional wall-mount hardware are available.

CSX-SERIES - CEILING SPEAKERS

For discrete installation in ceilings or walls, the CSX-series is a two way speaker series available in three sizes, the grille is frameless with magnets for easy and fast installations, the CSX series comes with white grilles, but black grilles are available and easy to change.

The speakers features both 8 ohm Lo-Z mode, and have a switch for selecting 100V Hi-Z mode with several different power-taps depending on needed power.

CSX502 features a 5" woofer and a 0,75" dome tweeter,

CSX602 features a 6,5" woofer with a 1" dome tweeter,

CSX802 features a 8" woofer with a 1,5" dome tweeter.

Available with or without back-cover.



prophon

MADE IN SWEDEN SINCE 1985





PROPHON

MADE IN SWEDEN SINCE 1985

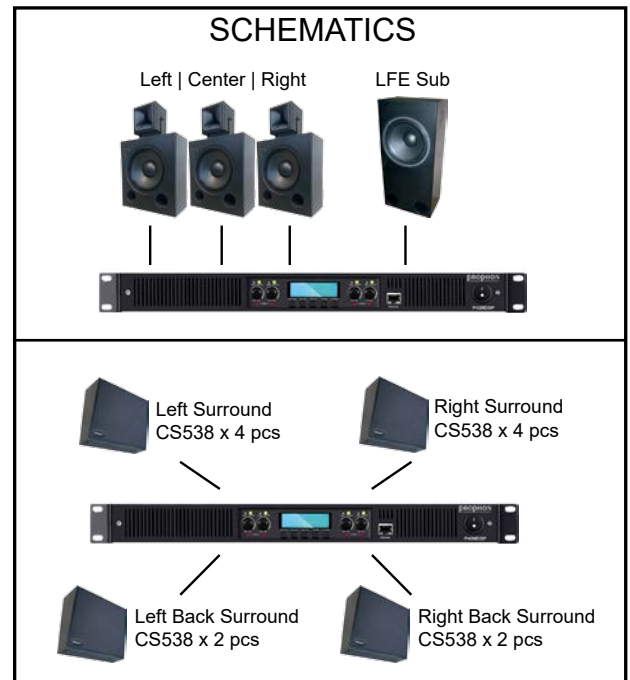
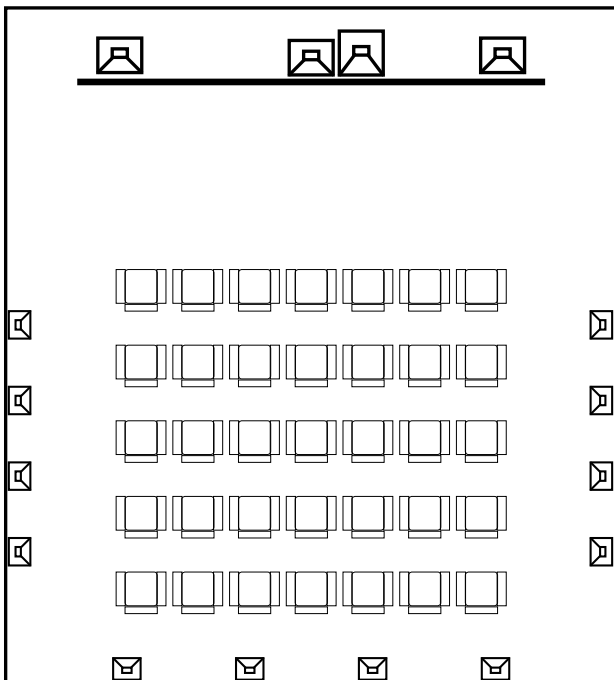


SETUP EXAMPLES

Each cinema auditorium installation is unique, but there are often similar setups in speakers, we have put together some general suggested setups with speakers and amplifiers for a couple of different sizes, in a comprehensive and easy-to-use guideline for fast planing and projecting of a cinema auditorium.

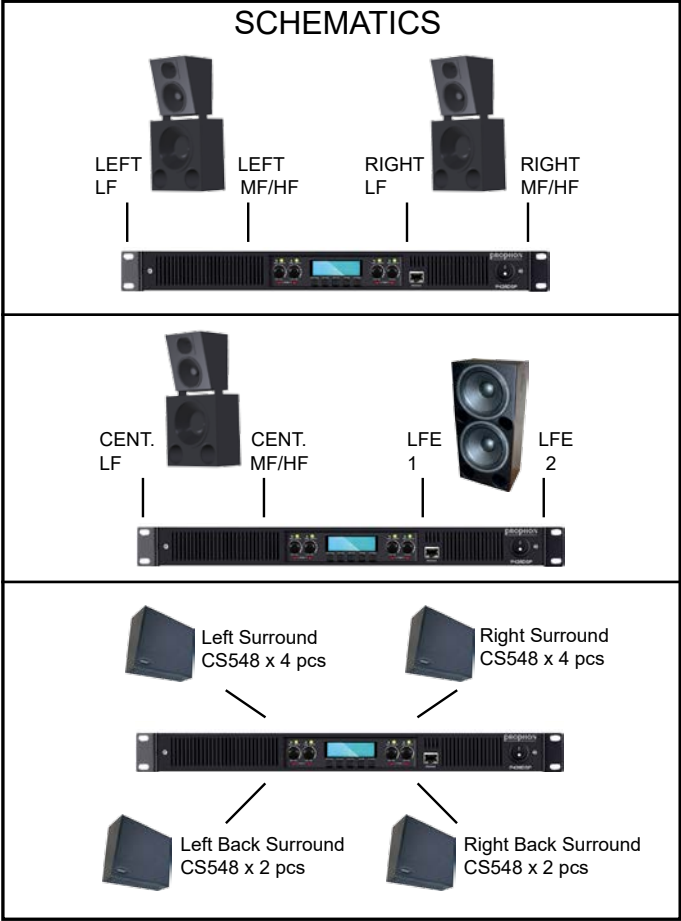
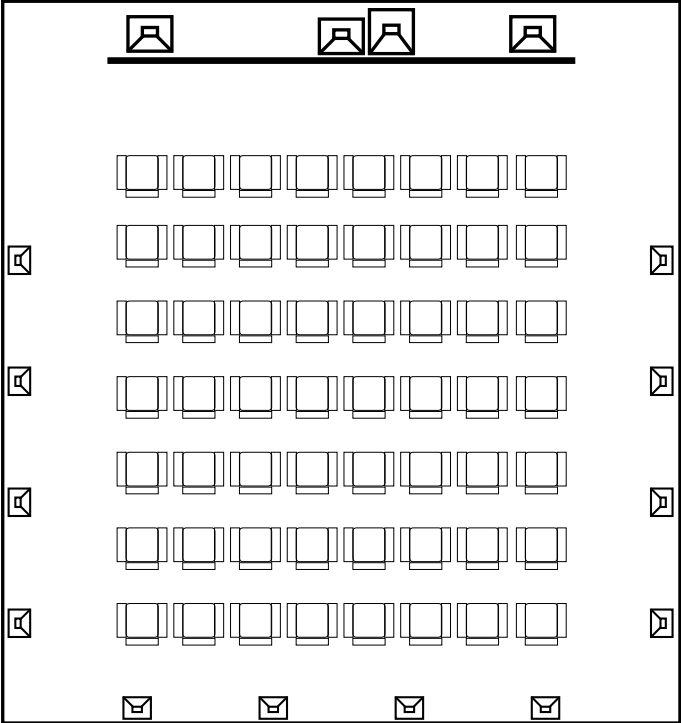
SETUP 1 - SMALL FORMAT UP TO 30 SEATS, 2-WAY PASSIVE SCREEN SPEAKERS

Surround speakers	8"/1"	CS538 x 12 pcs	
Screen speakers	15"/1"	CS1151 x 3 pcs.	
LFE Subwoofers	1x18"	CS5118 x 1 pc.	
Amplifier Surround		P426DSP x 1	
Amplifier screen speakers and subwoofer		P426DSP x 1	



SETUP 2 - SMALL FORMAT UP TO 70 SEATS, 3-WAY BI-AMPLIFIED SCREEN SPEAKERS

Surround speakers	10"/1"	CS548 x 12 pcs	
Screen speakers	15"/10"/1"	CS21511 x 3 pcs.	
LFE Subwoofers	2x18"	CS5218 x 1 pc.	
Amplifier Surround		P426DSP x 1	
Amplifier screen speakers and subwoofer		P426DSP x 2	



SETUP 3 - MEDIUM FORMAT UP TO 250 SEATS, 3-WAY BI-AMPLIFIED SCREEN SPEAKERS

Surround speakers 10"/1"

CS548 x 18 pcs



Screen speakers 2x15"/10"/1"

CS23011 x 3 pcs.



LFE Subwoofers 2x18"

CS5218 x 2 pc.



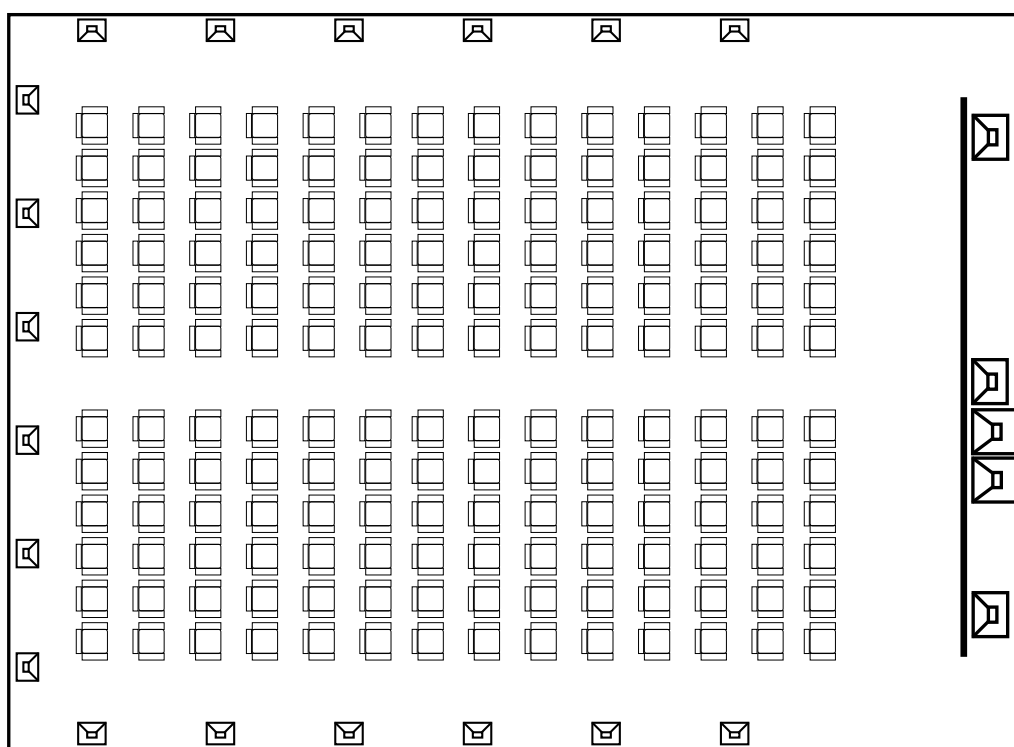
Amplifier Surround

P426DSP x 2

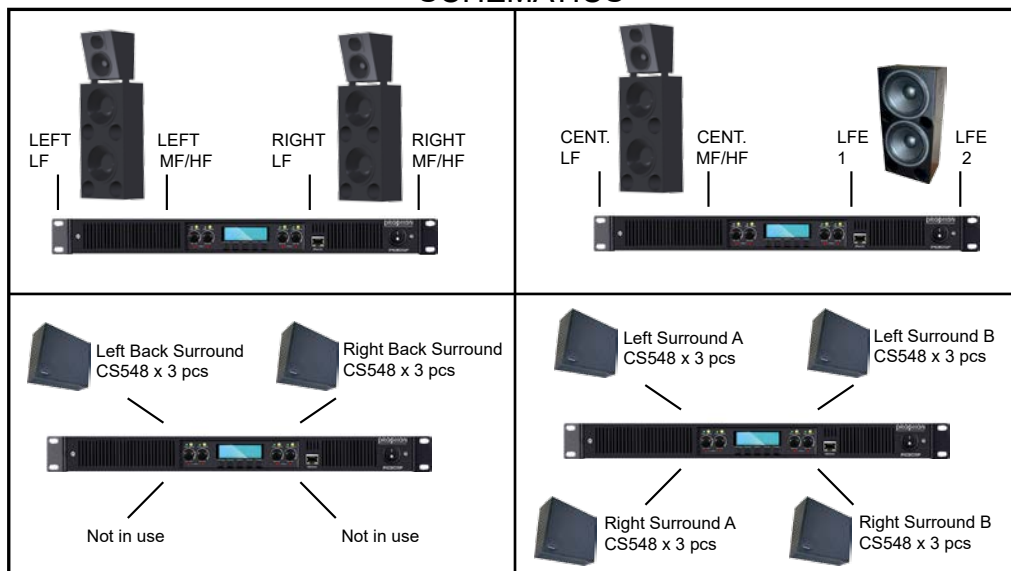


Amplifier screen speakers and subwoofer

P418DSP x 2



SCHEMATICS



SETUP 4 - LARGE FORMAT UP TO 350 SEATS, 3-WAY BI-AMPLIFIED HORN-LOADED SCREEN SPEAKERS

Surround speakers 12"/1" CS558 x 24 pcs



Screen speakers 2x15"/10"-horn/1" CS31512 x 3 pcs.



LFE Subwoofers 2x18" CS5218 x 3 pc.



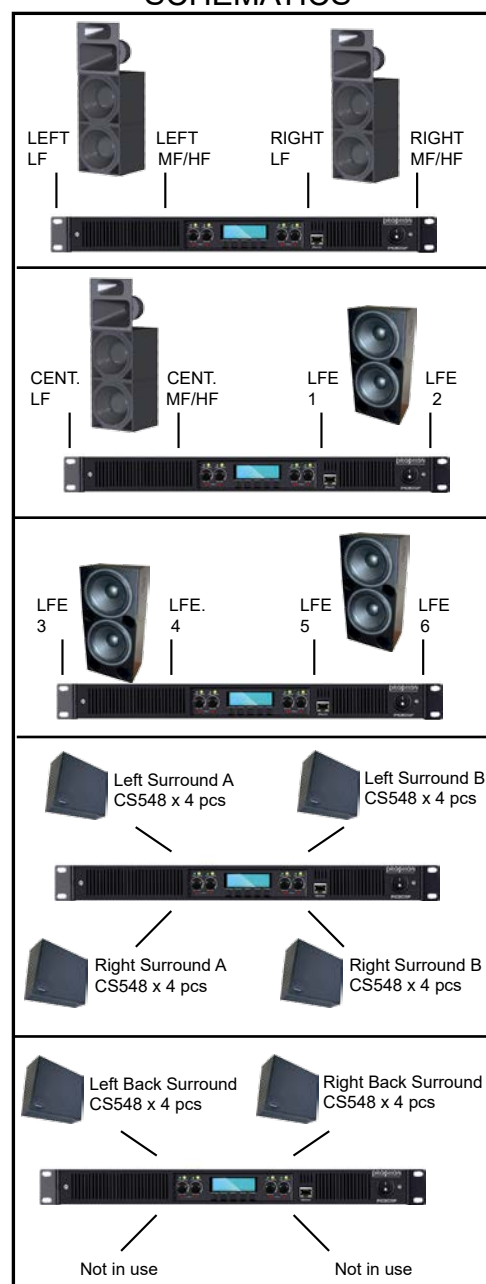
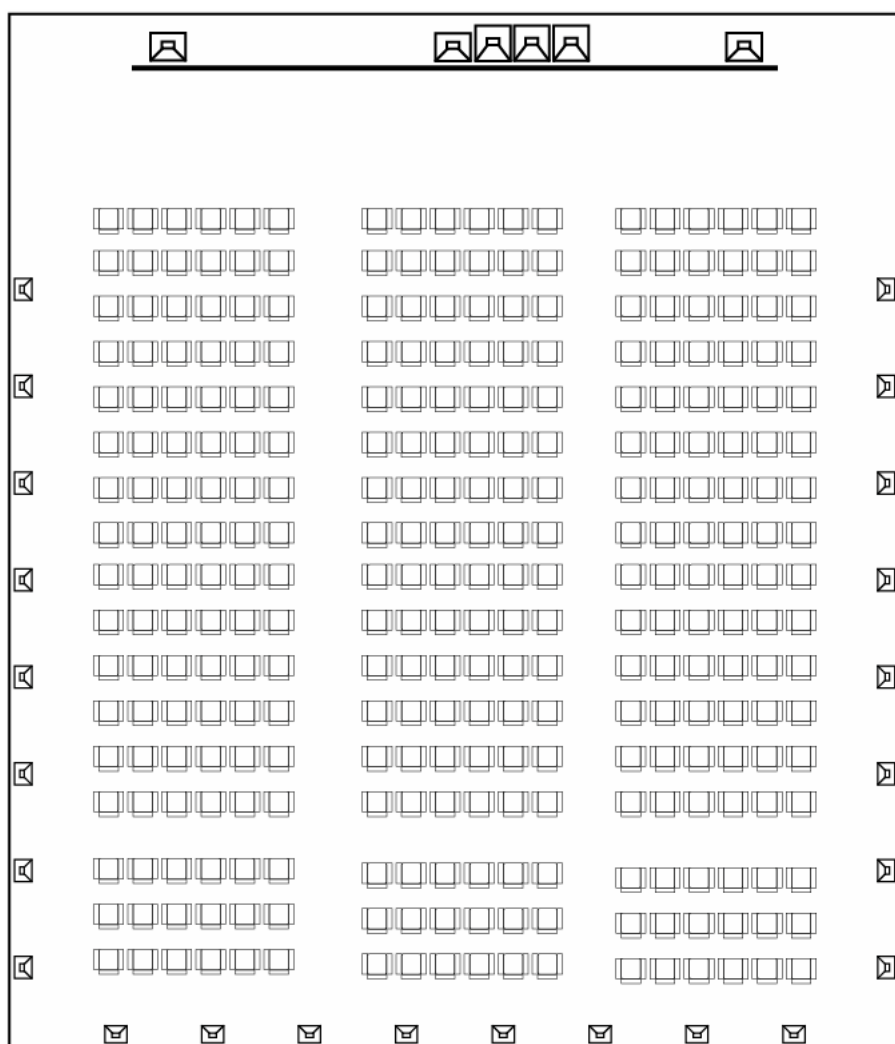
Amplifier Surround P418DSP x 2



Amplifier screen speakers and subwoofer P418DSP x 2

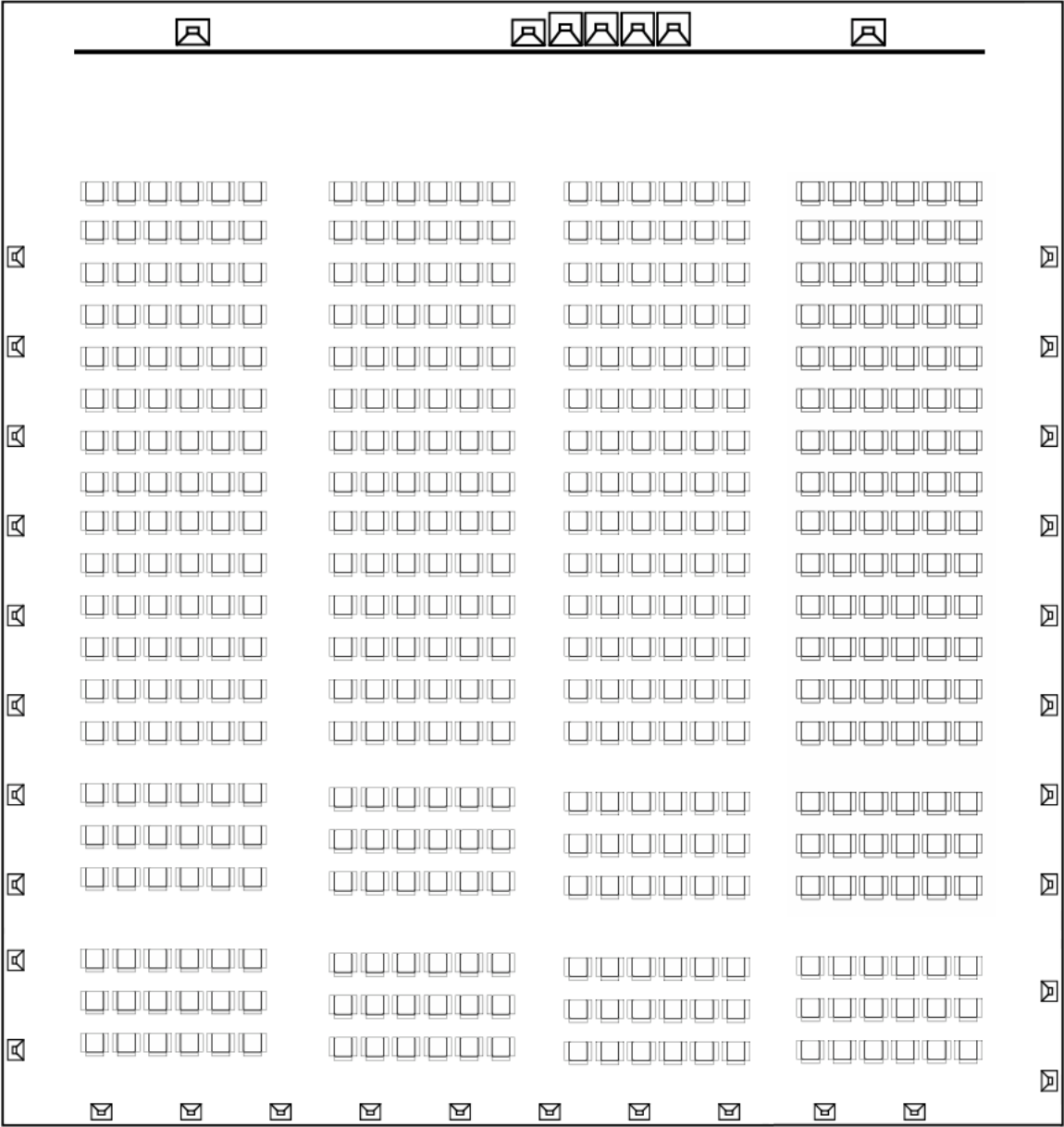


SCHEMATICS



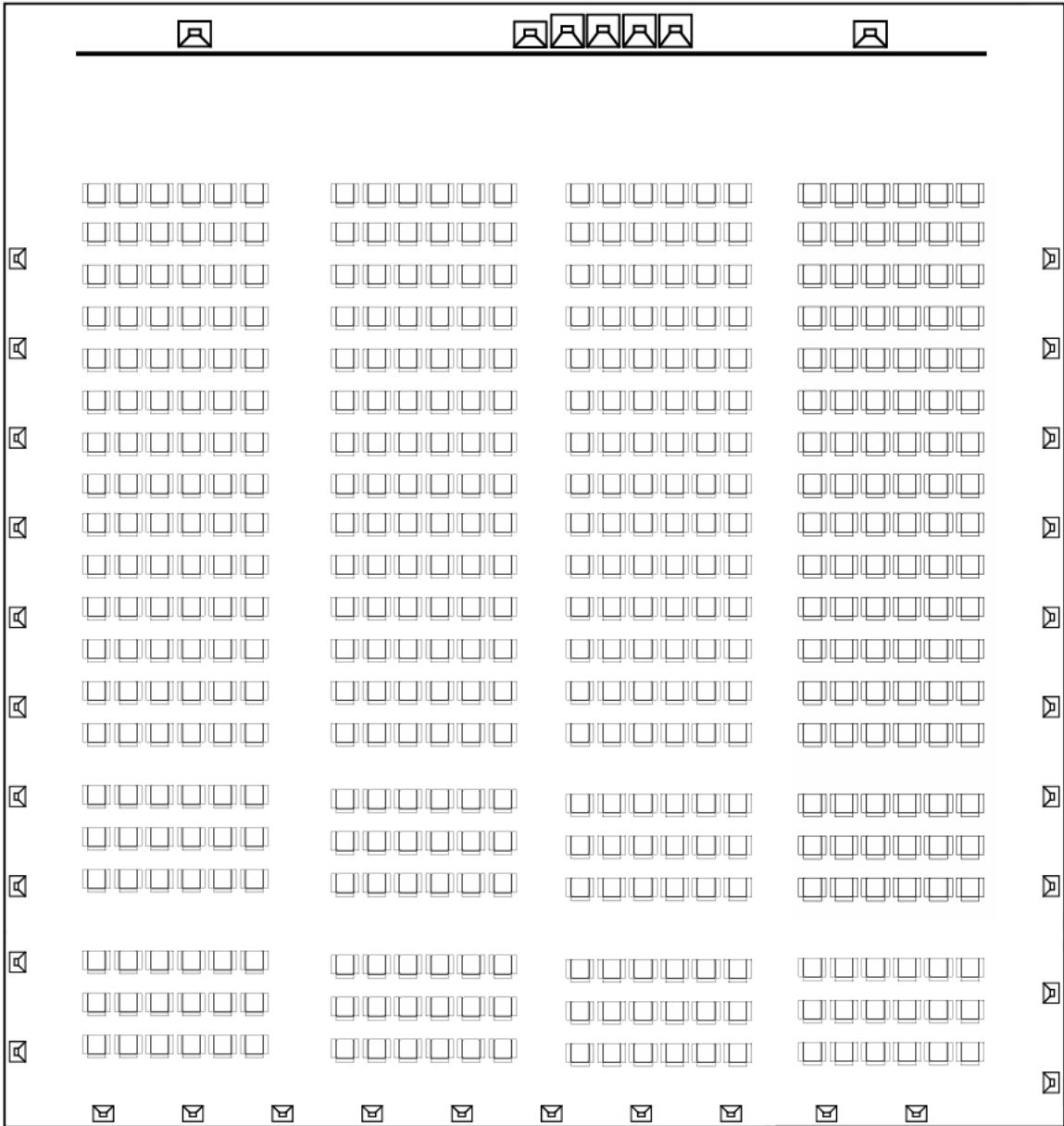
SETUP 5 - LARGE FORMAT UP TO 700 SEATS, 4-WAY TRI-AMPLIFIED HORN-LOADED SCREEN SPEAKERS

Surround speakers, 3-way bi-amplified 12"/6",5/1"	CS758 x 30 pcs	
Screen speakers. 4-way, tri-amped 2x15"/10"/4,5"/1"	XD215/XD111 x 3 pcs.	
LFE Subwoofers 2x21"	CS6221x 4 pc.	
Amplifier Surround, 4 x 1500W	P41200DSP x 3	
Amplifier screen speakers, 4 x 1500W	P41200DSP x 3	
Amplifier subwoofer, 4x2400W	P42400DSP x 2	



SETUP 6- LARGE FORMAT LINE ARRAY SPEAKERS

Surround speakers, 3-way bi-amplified 12"/6",5/1"	CS758 x 30 pcs	
Screen speakers. line array MF/HF module	CLAM21041 x 3 pcs.	
Screen speakers LF 3x15"	CLAM315 x 3 pcs	
LFE Subwoofers 2x21"	CS6221x 4 pc.	
Amplifier Surround, 4 x 800W	P4800DSP x 4	
Amplifier screen speakers, 4 x 1500W	P41200DSP x 3	
Amplifier subwoofer, 4x2400W	P42400DSP x 2	



Surround / ceiling speakers, 3-way bi-amplified 12"/6",5/1"
with aimable MF/HF

CS768 x 42 pcs



Screen speakers. 4-way, tri-amped 2x15"/10"/4,5"/1"

XD224 x 5 pcs.



LFE Subwoofers 2x21"

CS6221x 4 pc.



LFE subwoofers side 1x15"

XD115 x 4



Amplifier Surround, 4 x 400W

P4300DSP x 11



Amplifier screen speakers, 4 x 1500W

P41200DSP x 4



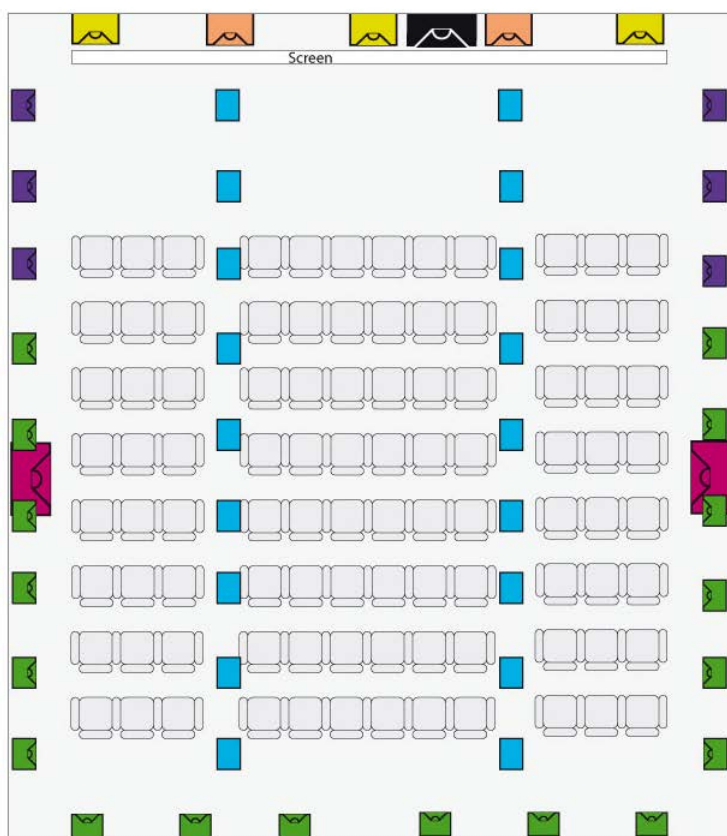
Amplifier LFE surround subwoofer, 4x1500W

P41200DSP x 1



Amplifier LFE subwoofer, 4x2400W (2x4800W)

P42400DSP x 2



Existing 5.1/7.1 speakers:

- Left/Center/Right Speakers
- Surround/Rear speakers
- LFE (subwoofer)

Additional speakers for Dolby Atmos:

- Left-center/Right-center speakers
- Additional side speakers
- Ceiling Speakers
- Side LFE (subwoofers)

[illegible]

PROPHON
SOUND SYSTEMS



MADE IN SWEDEN SINCE 1985

CINEMA SOLUTIONS 2020