Yorkville



PARALINE

Compact Expandable Active Vertical Array Loudspeaker System

PARALINE Series

PSA1

key features

- Ultra High Performance Compact Active PA System
- Uses Patented Paraline Horn Lens Technology
  (from the VTC Elevation Series Vertical Array Touring Systems)
- High quality Speaker Components
  (including 18 Sound 6-inch Woofers and BMS Compression Drivers)
- Focused 15° Vertical Dispersion for Minimum Interference Between Arrayed Cabinets

Wide 110° Horizontal Dispersion Pattern

- Manufactured Using Light-weight/Strong ABS Cabinet Material
- Stacks using Standard Speaker Stand on Integrated Dual Angle Stand Mount Adaptor *(Maximum Two Cabinets per stand)*
- Installation Hardware Available
- Up to Four PSA1 Cabinets Can Be Easily Powered on one 15 Amp Circuit
- Made in Canada



Yorkville Sound's Paraline Series active full range loudspeaker system delivers the clarity and precision of a complex line array system in a compact, user friendly format. Innovative cabinet design uses Yorkville Sound's proven Paraline high frequency lens technology pioneered in our flagship VTC Elevation Series line array cabinets.

Coverage

Two 1.75-inch compression drivers mounted to the patented Paraline lens delivers a focused 15-degree vertical dispersion and wide 110 degree horizontal coverage.

Drivers

Four high quality 6-inch woofers provide a tight and ultra responsive low frequency program.

Portability

Rugged injection molded ABS cabinet and Neodymium magnet woofers minimize overall cabinet weight making a full system transport and set-up can easily be handled with a single operator.

Simplicity

Designed to deliver maximum performance with minimum complication, the PSA1's integrated power amplifiers and internal DSP mean no external processing is required. Direct connect to mixer source and set system levels, and the system is ready for the show. Ideal for mobile PA applications in venues where access to complex trussing or roof hangs isn't practical, the Yorkville PSA1 cabinet mounts quickly and securely on a typical speaker stand. Innovative dual position stand mount offers two potential cabinet angles for expanded setup options. Up to two PSA1 cabinets can be stacked safely and securely on a single traditional stand.

Efficiency

Highly efficient amplifier design means each PSA1 draws less than 3 amps in typical operation meaning up to four cabinets can operate safely on a standard 15 amp service. This allows efficient set up using AC loop thru connections on the PSA1 while avoiding nuisance tripping of mains breakers. This also minimizes the need for multiple extension cables or access to multiple house circuits often needed for an active PA setup.

PARALINE Series

PSA1

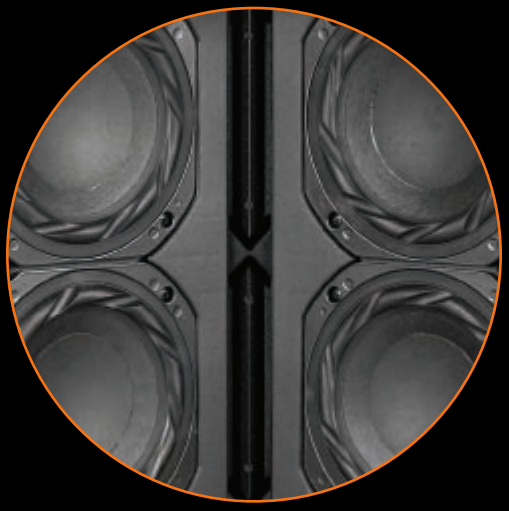
PSA1 Paraline Lens Technology

The heart of the PSA1 design is the high frequency Para-Line lens. Invented by Tom Danley, this patented technology transforms a point source into a uni-phase plane wave, allowing multiple high frequency drivers to sum coherently in the vertical plane without self-interference. This provides an effective impedance transformation while at the same time adjusting the path length in a continuously variable way which creates a dispersion pattern with the same characteristics as that of a much deeper conventional horn.

The Paraline Lens eliminates the impractical depth needed to make a conventional horn that would sum into a non-interfering source needed for multiple cabinet arrays. In the case of the PSA1, a vertical dispersion pattern of 15° is achieved with a Paraline lens less than one inch deep, where a conventional horn design would need to be several metres in length.

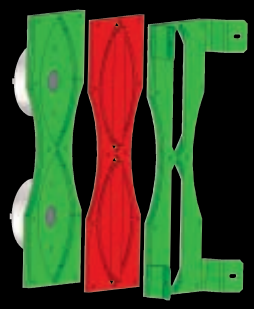
Innovative Multiple Woofer Configuration

Four 6-inch high power woofers mounted on the "V" shaped front baffle /horn utilize the entire front surface area of the cabinet to increase loading on the drivers and control pattern coverage at lower frequencies. This unique four woofer design increases power handling while reducing power compression by spreading the work load out over four long excursion voice coils and heat sinks (magnets).











PSA1

Installation Hardware

Yorkville Paraline Series PSA1 cabinets can be flown in any installation quickly, securely and very cost effectively with the addition of optional flying hardware **(PSA1RIGKIT)** and a proprietary bumper **(PSA1FRAME1)**. The PSA1RIGKIT installs directly to the PSA1 without modification to the cabinet using mounting points integrated in the all-metal aluminum cabinet handles. A maximum of four PSA1 cabinets can be arrayed safely using PSA1RIGKIT assemblies. The entire array can then be safely flown using a single PSA1FRAME1 bumper.

The PSA1FRAME1 bumper has several flying points to angle the array in simple two-point hangs. The efficient design allows the PSA1 cabinets to be rigged with the frame kit in the field with a minimum of time and effort. The hardware maintains fixed cabinet to cabinet splay angles for seamless vertical coverage.

The Modular PSA1 system can be configured for optimum coverage in most installations quickly and effectively without complicated hardware, or additional external signal processing making it the most cost effective installation solution delivering the performance of a compact vertical array.

A system comprised of two PSA1 cabinets delivers 30°V x 110°H coverage using two PSA1RIGKITs and one PSA1FRAME2. A three cabinet 45°V x 110°H array can be created with the addition of one PSA1 and one additional PSA1RIGKIT. A maximum of four cabinets can be configured for specialized installs where a 60°V x 110°H array may be required.







Optional PSA1 Grille Foam Kit

An optional user installable mesh kit that effectively hides the internal drivers and horn assembly of the PSA1 is available. Ideal for installations and applications where a more subtle cabinet appearance is required, the acoustically transparent grille material **(PSA1FOAM)** can quickly be retrofitted to any PSA1 with the quick removal of four hex bolts on the front of the cabinet and attaching the PSA1FOAM kit using a high quality adhesive* to the existing all-metal PSA1 grille.

***Note:** Adhesive not supplied – we suggest using a high quality spray adhesive like 3M™ Super 77™*



PARALINE Series

PSA1S

key features

- Ultra High Performance Compact Active Subwoofer
- High Quality Dual 12-inch Speaker Components
- Bass Reflex Design
- Ideal Companion Subwoofer for PSA1 System
- Solid 15mm Birch Cabinet Construction
- Integrated Pole Mount Adaptor & Heavy Duty Wheels
- Made in Canada



The 1400-watt dual 12-inch active PSA1S bass reflex subwoofer is the ideal companion sub for the PSA1 full range loudspeaker system

Construction

Solid 15mm birch plywood cabinet construction and an integrated all-metal pole-mount adaptor make the PSA1S the perfect platform for stacking PSA1 cabinets in a scalable array system. Compact design, heavy-duty wheels and handles ensure the PSA1S can easily be handled by a single operator for economical system set-up.

Efficiency

Efficient Class-D power amplifier design provides unmatched long-term reliability in the field. Cable of direct connection to any audio source (including speaker level input) the PSA1S can be easily integrated in to virtually any PA application, making it one of the most versatile active subwoofer solutions Yorkville Sound currently offers.



Heavy Duty Precision Stand Adaptor

The PSA1S Subwoofer is one of the first products to use Yorkville Sound's new Heavy Duty Precision Stand Adaptor. In order to minimize top cabinet sway and provide an improved standmount platform for multiple PSA1 cabinets, the PSA1S subwoofer standmount adaptor uses an extremely thick walled cast aluminum stand receiver with a wider mounting plate than has been used on Yorkville subwoofers in the past. Precision machining after casting allows the highest tolerances possible, this new improved stand adaptor provides a more stable, highly secure pole mount system for mobile Paraline systems when used in combination with the Yorkville SW-TUBEHD Heavy Duty all steel subwoofer tube.







PARALINE Series

PSA1

Compact Expandable Active Vertical Array Loudspeaker System

Specifications:

Type:	Active Full Range Cabinet
Power:	700 Watts (Program Power) / 1200 Watts (Peak)
Driver Configuration:	4 x 6-Inch Woofers / 2 x 1-inch Paraline Lens
Frequency Response:	75 – 20,000Hz (+/- 3db):
Max SPL:	125dB (Continuous) / 128dB (Peak)
Crossover Frequency:	1.2kHz
HF Driver(s):	2 x 1-inch exit Compression Drivers w/ 1.5-inch Voice Coil
HF Dispersion:	110 °H x 15°V
HF Power Amplifier:	75 Watts (Program Power) / 200 Watts (Peak)
HF Protection:	Peak and Average Limiting
HF Amplifier Type:	2-Tier Class-H
LF Driver(s):	4 x 6-inch Neodymium Woofers w/ 1.75-inch Voice Coil
LF Power Amplifier:	625 Watts (Program) / 1000 Watts (Peak)
LF Protection:	Excursion, RMS
LF Amplifier Type:	Class-D
Cooling Scheme:	Convection
Power Cable:	Removable Locking IEC Input and Loop Thru Output
Power Switch:	Yes
Power Consumption (typ/max):	135 VA / 225 VA
Input:	1 x Combi-jack XLR / 1/4-inch Jack
Outputs:	1 x XLR Loop Thru
Input Sensitivity:	1.4 Vrms (sine) at center
	0.35 Vrms (sine) at Maximum
Level Controls:	Volume
EQ Controls:	HF Boost Switch, Mode Switch (Full Range or with Sub)
Limiter:	Peak and Average limiting on Horn and Woofer
LED Indicators:	Power, Limit, Clip
Enclosure Materials:	Injection Molded ABS
Baffle Material:	Injection Molded ABS
Covering / Finish:	Urethane Paint (Black)
Dimensions (DWH xbackW, inches):	14.5 x 20.5 x 16
Dimensions (DWH xbackW, cm):	6.8 x 52.1 x 40.6
Weight (lbs/kg):	47 / 21.4



Specifications subject to change without notice

Yorkville

PARALINE Series

PSA1S

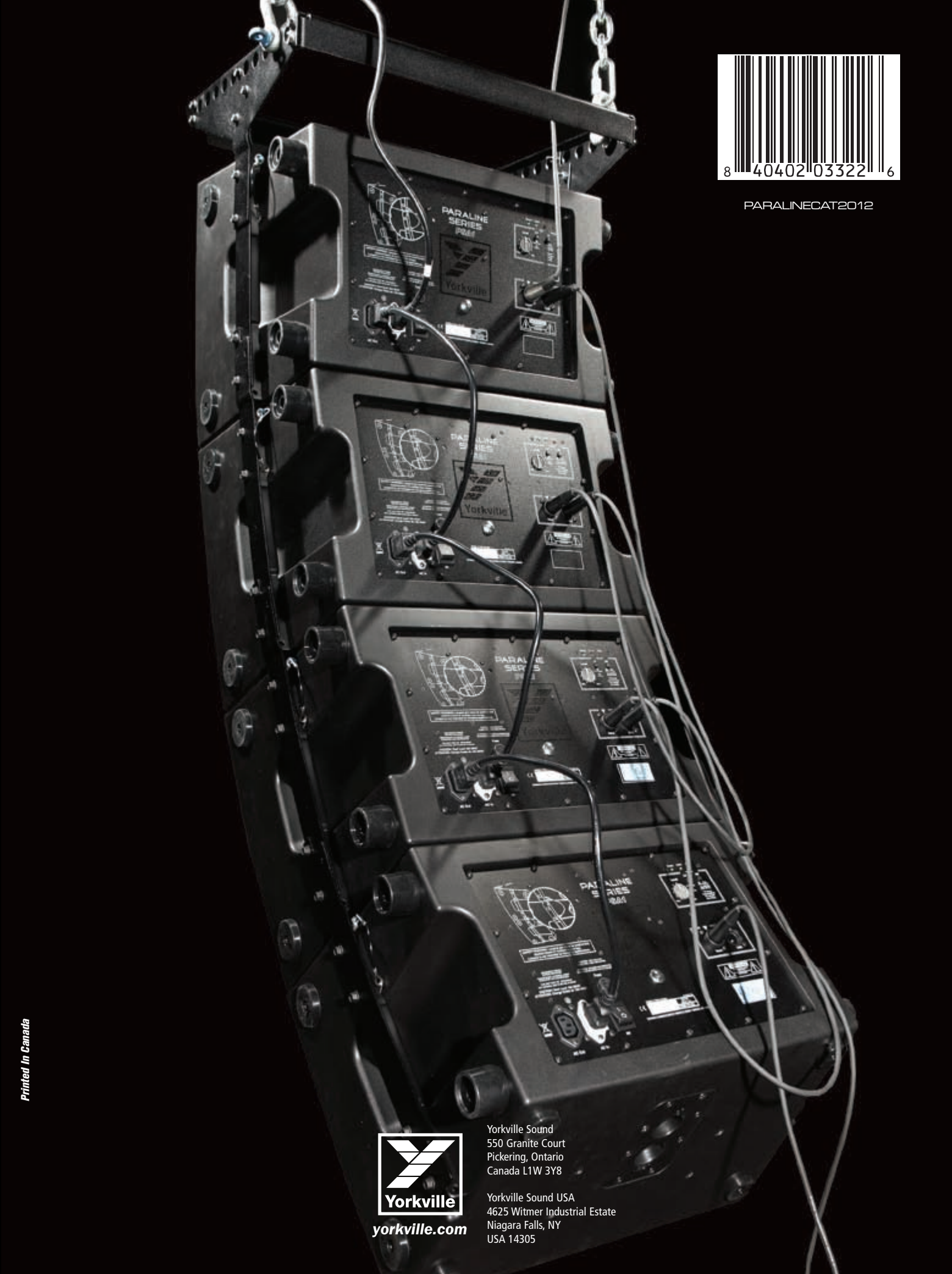
Compact Active Subwoofer

Specifications:

Type:	Active Bass Reflex Subwoofer
Power:	1400 Watts (Program Power) / 2800 Watts (Peak)
Driver Configuration:	2 x 12-inch
Frequency Response:	37 – 100Hz (+/- 3dB)
Max SPL:	129dB (Continuous) / 135dB (Peak)
Crossover Frequency:	Fixed @ 100Hz
LF Driver(s):	2 x 12-inch Ceramic Woofers w/ 3-inch Voice Coil
LF Protection:	Thermal, Short Circuit
LF Amplifier Type:	Class-D
Cooling Scheme:	Convection
Power Cable:	Removable Locking IEC Input
Power Switch:	Yes
Power Consumption (typ/max):	210 / 440 VA
Input:	1 x XLR and 1 x 1/4-inch (Selectable Speaker/line Level)
Outputs:	1 x XLR and 1 x 1/4-inch Loop Thru
Level Controls:	Volume
LED Indicators:	Power, Fault, Limit, Clip
Enclosure Materials:	15mm Birch
Covering / Finish:	Urethane Paint (Black)
Dimensions (DWH xbackW, inches):	22.75 x 14 x 32
Dimensions (DWH xbackW, cm):	57.8 x 35.6 x 81.3
Weight (lbs/kg):	75 / 34.2



Specifications subject to change without notice



8 40402 03322 6

PARALINECAT2012

Printed In Canada

Yorkville

yorkville.com

Yorkville Sound
550 Granite Court
Pickering, Ontario
Canada L1W 3Y8

Yorkville Sound USA
4625 Witmer Industrial Estate
Niagara Falls, NY
USA 14305