

# user manual



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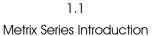
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The Adamson Metrix Series is designed for small to medium permanent installations and for use as the main PA system in smaller touring applications. The Metrix Series is a solid solution for large format touring as a front fill, lip fill or as out fill arrays. The ultra compact enclosures feature a 5° vertical (Metrix) pattern, and a 15° vertical (Metrix W - Wide Angle Vertical Enclosure) pattern, by 120° horizontal pattern. Metrix Series is available in 2 versions, the Touring-t and Installation-i.



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# 1.2 What is in the Metrix?



#### METRIX





The ultra compact Metrix enclosure features a 5° vertical pattern by 120° horizontal pattern.

The newly designed Adamson ND8-LM 8.5" Kevlar neodymium low-mid frequency driver is optimized for the 2-way enclosure, and is paired with a 1.4" HF (3 inch diaphragm) compression driver, mounted on Adamson's patented HF wave-shaping chamber

### METRIX



Adamson ND8-LM



B&C DE 800 1.4" Compression Driver



The ultra compact Metrix enclosures feature a 15° vertical pattern by 120° horizontal pattern. It has all the same components as the Metrix enclosure except its sound chamber produces a 15° vertical pattern used to cover front rows at the bottom of the array, or as a fill box.





Adamson ND15-S Driver



The Metrix convertible cardioid sub boasts two newly designed ND15-S 15" Neodymium Kevlar drivers specifically designed for the Metrix Sub. They are manifold mounted within an ultra compact, tuned, and vented enclosure. The Metrix Sub-t can be flown with both the i & t series and can be used as a pole mount base with a pair of Metrix W-t's. The Metrix Sub-i includes no rigging hardware and is designed for use in ground stacking applications only.



### 1.3 Rigging Options & Adapters



The new series is available with 2 different rigging systems: Touring (Metrix-t) and Installation (Metrix-i) versions.

Metrix-i introduces the EIR™ 'Enclosed Installation Rigging' system, which is a semi-permanent lightweight solution, designed for the economically concerned customer.

Metrix-t features AIR™-the world's most convinient rigging system, familiar to many from the SpekTrix Line.









Screws for the EIR™ Plate come with every EIR™ plate order.

Additional screws can be ordered.

The screw has a 6mm Hex Button head

The powder coated aluminum Metrix Rigging Frame-t has a single moveable pick point, and comes with Standard with Metrix Stacking <u>Plates</u> in order to attain 3 degrees of negative angle and all necessary push pins.

The powder coated Metrix-i Rigging Frame is made of Steel and It comes standard with a hanging bracket and all necessary hardware.

An Extended Metrix Stacking plate for attaining up to 13 degrees negative angle is also available.

The Metrix Symmetrical Adapter-t (Metrix is a 2-way asymmetric cabinet) One Metrix-t array can be flown upside down to match the waveguide placement in the left and right arrays. In other words; all the waveguides are on the insides of the arrays, or all the waveguides are on the outside of the arrays.





 $\mathsf{EIR}^{\scriptscriptstyle\mathsf{TM}}$  plate for Metrix and Metrix W



Install version is made of steel, and touring version of light weight Aluminum



### 1.3 Rigging Options & Adapters



The <u>Metrix Install Adapter Plate</u> is available when wanting to fly the Metrix Sub in the same array with the Metrix-i or Metrix W -i enclosures. The Metrix Sub is flyable within the same array or behind the main array when trim heights are limited.

The Metrix Frame Link Adapter is available for connecting 2 frames together so that a sub array can be flown behind the main array.







Note: An additional rigging frame is needed. All necessary hitch pin clips are included with the Frame Link Adapter.











The Metrix W-t Polemount

Designed for use with one or two 15° W enclosures. The polemount allows 3 different angles for the bottom W enclosure (-5°, -10°, -15°) and can be mounted on top of ground stacked Metrix Subs, or used with a stand.

The Metrix AIR $^{\text{\tiny TM}}$  Rigging system on the W enclosure allows three positions. (zero=  $10^{\circ}$ , one= $13^{\circ}$ , two=  $15^{\circ}$ )

<u>Chart</u>

<u>Pole mount</u>	<u>First Enclosure</u>	
<u>Position</u>	Wheel Position	Second W Enclosure
-15°	0 (=10°)	-4.4
-15°	1 (=13°)	-1.7
-15°	2 (=15°)	+0.4
-10°	0	+0.6°
-10°	1	+3.3°
-10°	2	+5.4°
-5°	0	+5.6°
-5°	1	+8.3°
-5°	2	+10.4°









#### 1.3 Rigging Options & Adapters





For the Install version of the rigging frame, attach the hanging bracket to the steel frame. Note that there are several positions alongside the middle bar to attain the desired frame angle when flown.

In the Touring Version a moveable pick point is built in, therefore no hanging bracket is needed.

The  $EIR^{\mathsf{TM}}$  plates function in a similar manner as the  $AIR^{\mathsf{TM}}$  rigging wheel.

Each of the 6 positions are on a logarhitmic scale and do not present a full degree. (settings 0 to 5).



When using the EIR™ plates always attach the *first plate to the frame using setting 3 and to the first* enclosure using setting 4 in order to attain a flat 0 degrees between the first enclosure and the frame, when using the EIR™ 'W' (15-degree enclosure) plates always attach the *first plate to the frame using* setting 1 and to the *first enclosure using setting 2* in order to attain a flat 0 degrees between the first enclosure and the frame.

Each  $EIR^{\text{TM}}$  plate takes 4 screws: 2 Screws to the top enclosure and 2 to the bottom enclosure per side. All 4 screws in a single plate should be used with the same setting.

Eg. If one would like to use setting 2 in between box 1 and 2, all 4 screws (2 in box 1 and 2 in box 2) have to be placed in hole marked 2. If the desired angle in between box 2 and 3 is position 5, then all four screws should be placed in holes marked 5 and so on.

Both sides of the enclosure should always have the same settings in between the same enclosures.

Note: There is an arrow marking the front of the enclosure. Plates will only fit when placed the right way.

To attach a Metrix W enclosure with Metrix enclosures please use the **W Plates**. There are 3 "W to W' settings

marked W0, W1 and W2. The W is a  $15^{\circ}$  enclosure; and therefore can only be set up in 3 different angles.



Example 1. When Using two W enclosures (both top and Bottom box) use the W settings for top and bottom.

Example 2. To connect a W enclosure below a Metrix enclosure, use the plain (numbers only) settings on top and bottom of the W plate.

Note: All 4 sides (top and bottom enclosures, as well as both sides on the same enclosures) should always be used with the corresponding settings whether using W or regular setting numbers.





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#### 1.4 Accessories





#### The Metrix-t Flight Case

The flightcase fits 4 stacked enclosures. It is designed for 4 Metrix-t enclosures or 3 Metrix-t and a single Metrix W-t enclosure. The Metrix Case Lid is designed to be removed by a single person. It Also truckpacs easily. It's area dimetions a are identical to those of the M15 Roadcase.

#### The Metrix Sub Soft Covers

The covers are designed to protect the enclosures when in transport or in storage.

This Waterproof nylon fabric is durable and has foam lined padding to protect against scratches and bumps. The cover is designed for a pair or Metrix subs stacked on an optional wooden dolly.









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### product specifications





2 WAY CABINET WITH AN ADAMSON WAVE SHAPING SOUND CHAMBER

#### TWO RIGGING OPTIONS:

- METRIX -† FEATURES ENCLOSED AIR™
   (ADAMSON INTEGRATED RIGGING) SYSTEM
   USING A 'REVOLVING DISC'



The Adamson Metrix is a ultra compact 2-way true line source array which provides unmatched clarity for speech reinforcement and medium SPL for smaller to mid-size venue installations, or for use as an under hang-, side, front- or balcony fill cabinet in larger installations. The Metrix offers lighting fast rigging and multiple uses for touring applications of all sizes.

,The Metrix encompasses a newly designed Adamson ND8-ML 8.5" Kevlar neodymium low-mid frequency driver optimized for this 2-way enclosure, and B&C's brand new DE800 1.4" HF compression driver with an Adamson's patented high frequency wave shaping chamber. The result is clear, clean high end, with full and warm mid-range.

Metrix is an effective and economical choice for smaller installations in venues such as houses of worship, congress centers and for use at corporate gigs; where superior speech reinforcement, medium sound pressure levels, and exceptional clarity are a must. The Metrix makes for an impeccable main P.A system for smaller touring applications such as theatre & dance companies, when used in conjunction with the Metrix double 15" sub woofer, as well as for use as front-, side-, or stage-fill box fin full-sized touring applications.

Similar to the high-end SpekTrix True Line Source Array Series, The Metrix Series is designed for use in arrays of six or more elements, each enclosure has a 5 degree vertical x 120 degrees horizontal coverage pattern.

The enclosure design compliments the permanent installation market where sightline and visual distractions are not an option. The Metrix is recommended to be flown, using the carefully designed, integrated AIR rigging system, which allows 6 various rigging angles between each enclosure, measured in the logarithmic scale. As an economical option, the Metrix-i, debuts the EIR™ 'Enclosed Installation Rigging' system for venues looking for lower cost options, without sacrificing sound quality. The Metrix is light and simple enough to be rigged by a single person.

Product Code: Metrix -t 900044 Metrix -i 900055



# technical specifications

### METRIX



#### DESCRIPTION

The Adamson Metrix is a light, ultra compact 2-way true line array system, designed for installation or touring applications complete with two rigging system options.

Metrix is well suited for most installation oriented sound reinforcement applications, and is simply ideal for speech reinforcement for the economically concerned customer.

Despite of its compact size, the Metrix offers clean and even coverage, with a surprisingly high SPL that also satisfies many touring needs.

PHYSICAL DATA	
Height front (cm)	8.56" (21.7cm)
Width (cm)	21.25" (54 cm)
Depth (cm)	16.5" (42 cm)
Weight (kg)	t - 53.5 lbs (24.2 kg) i - 43.5 lbs (19.7 kg)
Shape	Trapezoid
Box Finish	Textured Water Borne Acrylic
Hardware Finish	Polyester Sandtex™ Powder
Optional Accessories	Black aluminum (t) / steel (i) rigging frame
Rigging	AIR™ / EIR™
Protective Grille	16 Gauge Cold Steel
Cabinet Construction	Rugged 11 ply Baltic Birch

#### **FEATURES**

- Adamson's patented wave shaping sound chamber
- 8.5" Kevlar Neodymium L/MF Driver
- 1.4" B&C Compression Driver
- Adamson Integrated Rigging (AIR™) System 'revolving disk rigging' in the Metrix -t
- Adamson Enclosed Installation Rigging (EIR) system in the Metrix -i
- Black aluminum rigging frame





Left:  $EIR^{TM}$  Rigging featured on the METRIX W-i Right:  $AIR^{TM}$  System standard on the METRIX W-t

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TECHNICAL DATA		
Frequency Response (+/-3dB)		
Full Range Preset	95Hz to 18kHz	
With Sub	35Hz to 18kHz	
Frequency Range		
Xover Preset	125Hz to 18kHz	
Directivity		
Horizontal	120°	
Vertical	5°	
Sensitivity (2.83V @ 1m)		
LMF	98dB	
HF	110.dB	
SPL (Continous / Peak)	126.5dB / 132.5dB	
LF/MF Section (Impedance Ω)	ND8-LM 8.5" Kevlar Neodymium Low/Mid-Range Driver (16Ω)	
HF Section (Impedance $\Omega$ )	3" B&C DE800 1.4" exit Compression Driver (16Ω)	
Power Handling	(AES / Program / Peak)	
L/MF	250 / 500 / 1000	
HF	110 / 220 / 440	
Connection	Neutrik Speakon NL8	



### product specifications





2 WAY CABINET WITH AN ADAMSON WAVE SHAPING SOUND CHAMBER

DESIGNED AS A COMPANION TO METRIX ARRAYS FOR EXTENDED COVERAGE

#### TWO RIGGING OPTIONS:

- METRIX W-† FEATURES ENCLOSED AIR™
   (ADAMSON INTEGRATED RIGGING) SYSTEM
   USING A 'REVOLVING DISC'
- METRIX W-i FEATURES THE ECONOMICAL EIR™
   'ENCLOSED INSTALLATION RIGGING' SYSTEM



The Adamson Metrix W is a super compact 2 -way true line source array which provides unmatched clarity for speech reinforcement. The 15-degree trapezoidal cabinet design makes it easy to achieve extreme downward angles at the bottom of an array - ensuring optimal coverage in the front rows - and is perfect for use in wide vertical coverage array designs (for instance, in theaters with multiple balconies).

The Metrix W encompasses a newly designed Adamson ND8-ML 8.5" Kevlar neodymium low-mid frequency driver optimized for this 2-way enclosure, and B&C's brand new DE800 1.4" HF compression driver with an Adamson's patented high frequency wave shaping chamber. The result is clear, clean high end, with full and warm mid-range.

The Metrix series is an effective and economical choice for smaller installations in venues such as houses of worship, congress centers and for use at corporate gigs; where superior speech reinforcement, medium sound pressure levels, and exceptional clarity are a must. Metrix makes for an impeccable main P.A. system for smaller touring applications such as theatre & dance companies, when used in conjunction with the Metrix double 15" sub woofer, as well as front-, side-, or stage-fill box in full-sized touring applications.

Similar to the high-end SpekTrix W, the enclosure design complements the permanent installation market where sightline and visual distractions are not an option.

The Metrix W is recommended to be flown, using the carefully designed, integrated AIR rigging system, which allows 3 various rigging angles between each enclosure. As an economical option, the Metrix W-i, debuts the EIR™ 'Enclosed Installation Rigging' system for venues looking for lower cost options, without sacrificing sound quality. The Metrix W is light and simple enough to be rigged by a single person.

Product Code: Metrix W-t 900056 Metrix W-i 900057



# technical specifications



#### DESCRIPTION

The Metrix W is a light, ultra compact 2-way true line array system, designed for installation or touring applications complete with two rigging system options.

Metrix W is well suited for most installation oriented sound reinforcement applications, and is simply ideal for speech reinforcement for the economically concerned customer.

Despite of its compact size, the Metrix W offers clean and even coverage, with a surprisingly high SPL that also satisfies many touring needs.

#### **FEATURES**

- Adamson's patented wave shaping sound chamber
- 8.5" Kevlar Neodymium L/MF Driver
- 1.4" B&C Compression Driver
- Adamson Integrated Rigging (AIR™) System 'revolving disk rigging' in the Metrix W-t
- Adamson Enclosed Installation Rigging (EIR) system in the Metrix W-i
- Black aluminum rigging frame





Left:  $EIR^{TM}$  Rigging featured on the METRIX W-i Right:  $AIR^{TM}$  System standard on the METRIX W-t

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PHYSICAL DATA	
Height front (cm)	10.31" (26.2cm)
Width (cm)	21.25" (54 cm)
Depth (cm)	16.5" (42 cm)
	t - 55.5lbs (24 kg) i - 45.5lbs
Weight (kg)	(19.5 kg)
Shape	Trapezoid
Box Finish	Textured Water Borne Acrylic
Hardware Finish	Polyester Sandtex™ Powder
Optional Accessories	Black aluminum (t) / steel (i) rigging frame
Rigging	AIR™ / EIR™
Protective Grille	16 Gauge Cold Steel
Cabinet Construction	Rugged 11 ply Baltic Birch

TECHNICAL DATA		
Frequency Response (+/-3dB)		
Full Range Preset	95Hz to 18kHz	
With Sub	35Hz to 18kHz	
Frequency Range		
Xover Preset	125Hz to 18kHz	
Directivity		
Horizontal	120°	
Vertical	15°	
Sensitivity (2.83V @ 1m)		
LMF	98dB	
HF	110.dB	
SPL (Continous / Peak)	126.5dB / 132.5dB	
LF/MF Section (Impedance Ω)	ND8-LM 8.5" Kevlar Neodymium Low/Mid-Range Driver (16Ω)	
HF Section (Impedance $\Omega$ )	3" B&C DE800 1.4" exit Compression Driver (16Ω)	
Power Handling	(AES / Program / Peak)	
L/MF	250 / 500 / 1000	
HF	110 / 220 / 440	
Connection	Neutrik Speakon NL8	



### product specifications



### METRIX SUB

ULTRA COMPACT ENCLOSURE DESIGNED FOR MAXIMUM EFFICIENCY

SWITCHABLE CONVENTIONAL OR TRUE CARDIOID PERFORMANCE

COST-EFFECTIVE, STACKABLE & FLYABLE WITH THE AIR™ SYSTEM FLYING HARDWARE



Designed to complete the Metrix series, this ultra compact line array cabinet is a convertible cardioid Sub; a single-sided box that can be arrayed conventionally or arrayed in back-to-front pairs for true cardioid performance.

The Metrix convertible cardioid sub's two newly designed ND15-S 15" Neodymium Kevlar drivers are vented similarly to the powerful SD-21, where the basket design uses "fins" as a cooling technique. Its innovative surround design coupled with Adamson's Advanced Architecture™ multilayer Kevlar cone; result in a stiffer cone and thus extraordinary performance. Together, the cabinet's ports, which are tuned for extreme low frequency and the manifold loaded drivers, encourage the most output for a sub in its category.

The Metrix Sub-t offers flexibility beyond its small size and concentrated power, using the patented  $AIR^{TM}$  System with the Metrix Frame Link Adapter for flying subs behind the main array when working with limited trim heights, The Metrix Sub-t features and works in conjunction with other  $AIR^{TM}$  system rigging elements to allow for a variety of configurations - attach the subs to the rigging frame and hang the Metrix-t or the Metrix-i (with an  $EIR^{TM}$  adapter) underneath them, or place your subs directly on the floor and ground stack your array on top.

The Metrix Sub-i is suited for ground stacking applications only, as it is rigging free. Both Metrix Sub series offer a standard built-in pole mount socket and the guts of the sub-i are identical to the Metrix Sub-t. The Metrix Sub-t loads in pairs on a wooden dolly board which has been designed to ensure safe truck pack. Metrix Sub accessories include waterproof soft covers and lightweight powder coated aluminum rigging frames with a single movable pick point.

Product Code: Metrix Sub-t 900058 Metrix Sub -i 900059



# technical specifications

# METRIX( SUB



#### DESCRIPTION

Provides high SPL extended bass to Adamson Metrix enclosures. The Metrix Sub is equipped with two powerful ND15-S Kevlar Neo low frequency drivers in a tuned, vented enclosure.

The cabinet is fully braced to minimize LF resonance and maximize efficiency. In the Sub-t, four sets of captured precision-machined aluminum rigging hardware retract into the cabinet body when not in use; and four NL8 connectors (two front, two back) enable easy cable loop-through regardless of the sub's orientation.

Metrix Sub Frame includes stacking plates for minus 3 degrees of negative angle.



PHYSICAL DATA		
Dimensions & Weight		
Height Front (cm)	24.41" (62)	
Width (cm)	21.37" (54)	
Depth (cm)	28.87" (73.3)	
Weight (Kg)	i - 117.5 lbs (53.2)	
	t - 129.5lbs (58.7)	
Box Shape	Rectangular	
Box Finish Hardware Finish	Textured Water Borne Acrylic Polyester Sandtex™ Powder	
Protective grille	14 Gauge cold steel	
Horn Configuration	Fiberglass Waveguide	
Cabinet Construction	Rugged 11 ply 5/8" Baltic Birch	
Rigging	AIR™ (-t) / no rigging hardware (i)	
Accessories	Black powder coated aluminum rigging frame (t) Steel rigging frame (i), Install adapter plate, Frame Link Plate, Wooden dolly, Waterproof Soft covers	

TECHNICAL DATA		
Frequency Response (+/-3dB)		
Full Range Preset	40Hz - 160Hz	
Frequency Range		
with Xover Preset	35Hz - 110Hz	
Maximum SPL (Continuous)		
with Xover Preset	130.4dB	
Maximum SPL (Peak)		
Xover Preset	136.4dB	
Sensitivity (2.83V @ 1m)		
LF	104.5dB	
LF Section (Impedance $\Omega$ )	ND-15 \$ 15" Kevlar Neodymium Driver x 2 (6 $\Omega$ )	
Power Handling	(AES / Program / Peak)	
2 x	500 / 1000 / 2000	
Connection	Neutrik Speakon™ NL8 connectors	
Processor Presets	XTA, PLM, LAKE	



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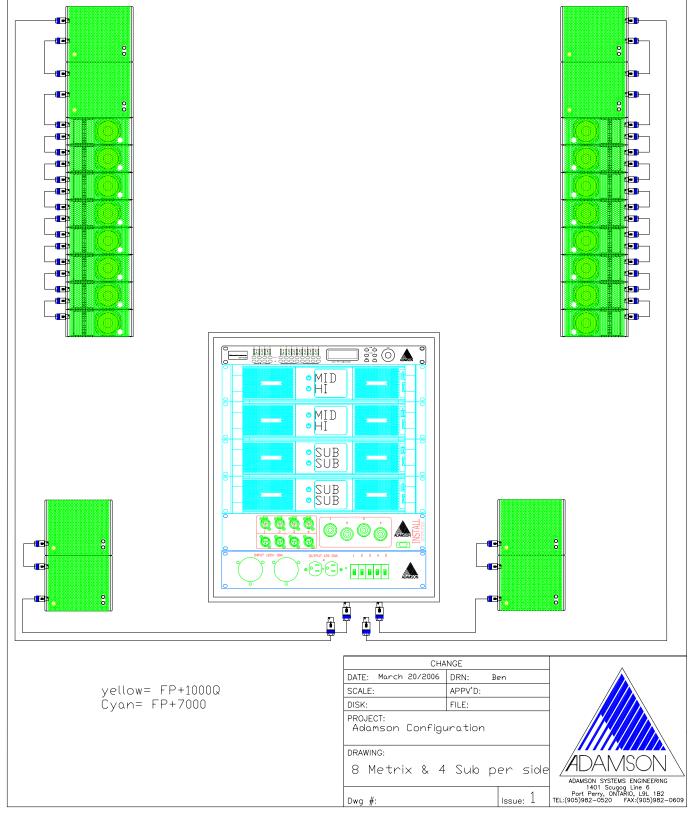
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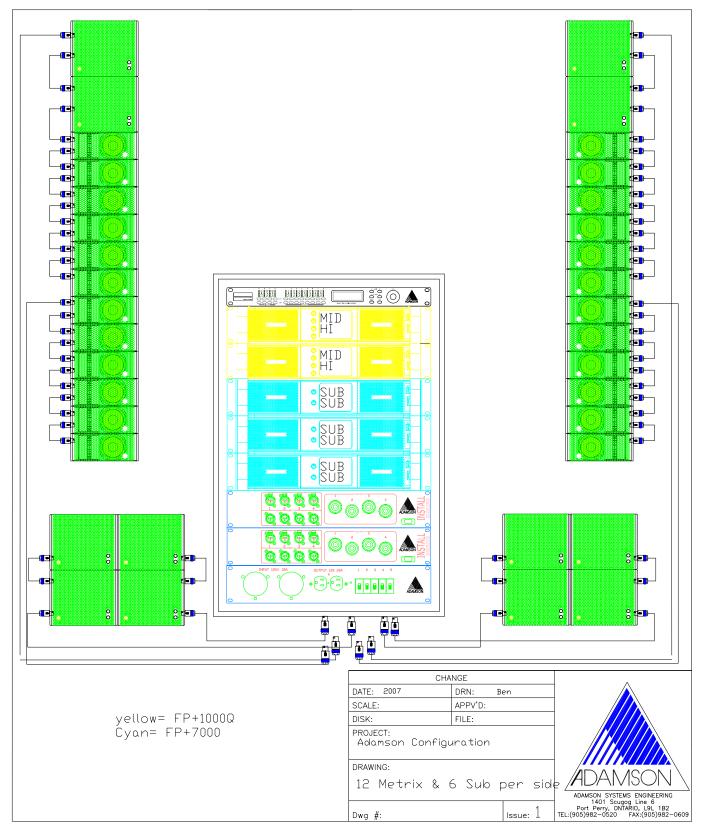
#### 1.6 Amp Configurations







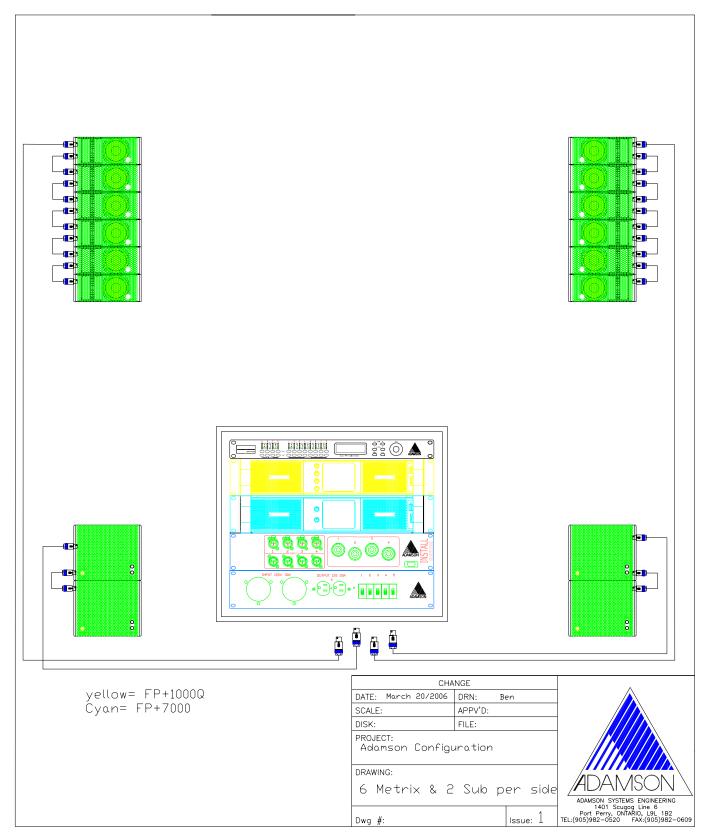
#### 1.6 Amp Configurations















#### 1.7 Part Numbers

Doub	Ni wala a s
<u>Part</u>	Number
METRIX-i	900055
METRIX-†	900044
METRIX W-i	900057
METRIX W-t	900056
METRIX SUB-t	900058
METRIX SUB-i	900059
METRIX ND15-S	911501
METRIX ND8-LM	910803
B&C DE800	860066
<u>EIR™ Plate</u>	883103 (Left or Right)
EIR™ Plate Screws (6mm Hex button head)	880088
AIR™ Wheel	884145 (Left or Right)
METRIX-t Rigging Frame (Aluminium)	920041
METRIX -i Rigging Frame (Steel)	920054
METRIX Install Adapter Plate	920055
METRIX Frame Link Adapter	920053
METRIX Symmetrical Adapter-t	883041
METRIX Standard Stacking Plate	883039
METRIX Extended Stacking Plate	883038
METRIX Sub Soft Covers	891026 (for 2 cabinets stacked)
METRIX Sub Dolly	804173 (for 2 cabinets stacked)
METRIX Flight Case	890152
METRIX W polemount Extention Rod	920210
METRIX W polemount Chassis	920206



#### 1.8 Additional Info



# Shooter.

#### Download:

http://www.adamsonsystems.com/technical\_ support/get\_adamson\_shooter/index.php

You'll need to call Adamson for a password. +1 905 982 0520 or e-mail info@adamsonsystems.com

#### **Nominations & Awards**

Pictured below: Groundstacked, as seen during the official release at the 2007 AES Show in New York, October 5th - 8th 2007.

The Metrix Sub received the Pro Audio Review's PAR Excellence award.

A previous Adamson recipient of the award was the SpekTrix W enclosure.

The Metrix Enclosure has been nominated for Outstanding Technical Achievement in the category of Sound Reinforcement Loudspeaker Technology in the 2008 TEC Awards.

Picture below right: Size comparison - The Metrix-t is flown beside the SpekTrix Series.







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