# **CARVIN**





**User Manual** 76-03210D 091212



# TRx3210 Line Array

# Table of Contents:

Introduction
Unpacking
Concept
Specifications4
The Line Array Effect Pure Path Horn Lens and MF/LF Drivers
Safety - Stacking and Flying
Ground Stacking
SureFly™ Rigging  - Assembling an Array
Amplification & Wiring  - Biamp
Amp Rack Packages20
Accessories2
Warranty2
System Packages



#### Introduction:

Congratulations on purchasing a TRX3000 Series loudspeaker from Carvin Professional Audio Products. The TRx Series are designed to give you the best in audio quality and many years of reliable, trouble-free operation. It offers excellent pattern control, simple ground stacking design as well as easy over-head suspension with safe and practical rigging hardware, superior audio quality, full technical documentation, and the backing of a world-class company with over 66 years of manufacturing experience and technology including a comprehensive warranty. Please read through this user manual carefully before you attempt to operate the loudspeaker system. It contains valuable information which will enable you to easily and quickly connect the loudspeakers along with important system set-ups, stacking and flying instructions.

#### Thank You

There are many options in the market place today for loudspeaker products and we thank you for choosing Carvin Professional Audio Products for your loudspeaker choice.

Carvin professional audio products are proudly engineered and manufactured in San Diego, California, USA!

If you would like additional information about this or any other Carvin product, please contact us. Complete and detailed product information is available on our web site.

#### Unpacking

Upon unpacking the unit, please check carefully for damage. If damage has occurred, please notify the delivery service at once. You, the consignee, must handle any claim. Please retain packaging in case of future re-shipment.

# TRx Line Array Concepts

Pulling from our TCS Audio engineering, Carvin has produced a modular line array loudspeaker system that is very adaptable to almost any performance venue. Not every scenario requires a flown PA system. So with that in mind, the TRx3210 Line array loudspeaker can easily be stacked or flown.

A new loudspeaker system can be an expensive investment. With the TRx3210 system, Carvin offers an extreme value allowing an affordable solution.



USA contact: Tony Mirador Office: 800.403.4484 x114 tonym@carvin.com International contact: Joel Kiesel Office: 760.522.5676 export@carvin.com

# TRx3210 Specifications

#### TRx3210F - with SureFly™ hardware pre-installed

System Type: Dual 10-inch 3-Way, Reflex Frequency Response: 70 Hz – 18.5 kHz (-10DB)

85 Hz - 16 kHz (-3 dB)

Coverage Pattern: 100° H x 10° V (single enclosure)

Crossover: 3-Way Quasi Speaker Guard<sup>TM</sup> HF protection

Crossover Frequencies: 500Hz & 1.5 k Hz

Sensitivity (1w @ 1m): 98dB

Maximum SPL: 131dB Peak single enclosure

137dB Peak four enclosures 140dB Peak eight enclosures

LF Driver: 2x 10-inch 2-inch VC HF Driver: 2x 1-inch exit 1.75-inch VC

Nominal Impedances (Continuous/Program/Peak)

Full range: 8 ohms 500w /1000w /2000w Bi-amp LF: 8 ohms 500w /1000w /2000w Bi-amp HF: 8 ohms 120w /240w /480w Enclosure: 13-Ply Russian Baltic Birch

Suspension/Mounting: 14 captive 3/8in-16 nut fly pts.

Two 1-3/8 pole mount cups

Finish: Black DuraTecTM UV, water resistant IP2

Transport: 2 Recessed Handles Grill: Black powder coated steel

Acoustically Transparent Foam Backing Connectors: Two 4-pin TwistLoc connectors

Dimensions (H x W x D): 11.8 in x 23.5 in x 14.75 in

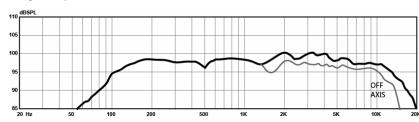
300 mm x 600 mm x 374 mm

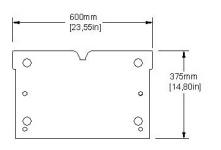
Net Wt: 52 lb (24 kg) without hardware

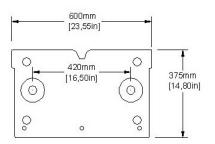
Maximum Fly Capacity: 16

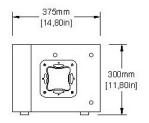
Made in USA

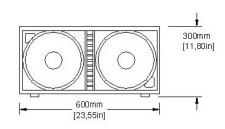
#### **Frequency Response**







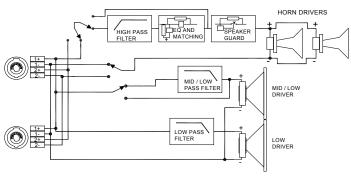




See pages 14-16 for full range - pin flip mode and bi-amp configuration



#### **Block Diagram in Full Range Mode**



# The Line Array Effect

The line-array effect is achieved by the 0 degree coupling of the enclosures in the array. The inherent advantage of a line array design allows the rear audience to hear nearly the same levels as the front. The PurePath<sup>TM</sup> horn produces a tight 10 degree vertical x 100 degree horizontal pattern on a single cabinet. Conventional enclosures drop 6dB when doubling the distance to the listener. However, when coupled in a line array this pattern narrows further to produce the line array effect, which drops only 3dB when doubling the distance to the listener. This effect is also present with the tight coupling of the 10-inch drivers in an 11.8-inch vertical box.

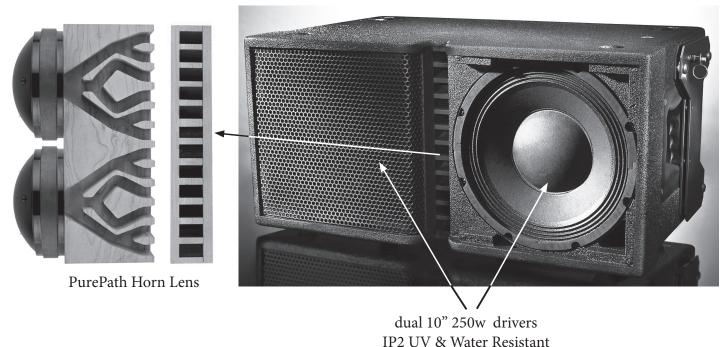
When the straight line of the line array is broken as in the case of a "J" curve, the elements curved at the bottom of the array behave more as a "point source" loudspeaker producing normal output to the closer listeners.

The TRx3210 can be deployed in a full curvilinear array at 12.5 degrees of angle between elements. This produces a smooth "point source" array covering 50 degrees of vertical and 100 degrees of horizontal coverage with only four enclosures.



#### The PurePath™ Horn Lens and dual 10" Drivers

The PurePath<sup>™</sup> Horn Lens is a one-of-a-kind design. This horn lens is CNC machined in-house from acoustically non-resonant Eastern Maple hardwood, providing a very smooth, equal path length wave guide for pure, natural and cylindrically projected highs. The two HF Mylar compression drivers feature a 1-inch exit and a 1.75" voice coil. The PurePath<sup>™</sup> Horn Lens places the HF drivers in proper phase alignment with the 10-inch drivers.



Two 10-inch MF/LF drivers feature 2-inch voice coils and power handling of 250w per driver. They are treated for IP2 UV approval, which is water resistant. These drivers are front loaded and field replaceable. The front steel grills are foam backed for added protection from the elements and are easily removed for service access.

# Stacking and Flying

#### **Overview**

To take full advantage of the extremely flexible properties of the TRx3210 system, two modes of rigging systems have been developed. The first mode utilizes the interlocking feet and pole mounts and the second mode is using the optional SureFly™ hardware. The two rigging systems allow either line arrays or virtual point source clusters to be assembled – intuitively, quickly and easily, and with an absolute minimum of additional external parts to suit the coverage requirements of a huge variety of professional sound reinforcement situations. The second mode using the optional SureFly™ hardware is inherently safe, flexible, self-contained and simple to use. The load is taken entirely through the SureFly™ hardware and not through the cabinet's woodwork. The rigging design allows the creation of clusters and arrays that can be assembled quickly and with a minimum number of crew, and with full control of the vertical angles between enclosures and the overall cluster inclination.

#### Safety Notes on Rigging - Important Please Read!

The Carvin SureFly™ rigging system has been designed and constructed to a high standard of safety and tested to the most demanding conditions. As a very first concern and in order to ensure the highest safety standards, the information following on the assembly and safe use of rigging accessories must be carefully understood and followed. Every user that operates, suspends, or lifts a TRx3210 loudspeaker system needs to be properly trained before ever constructing and deploying the system in a working situation.

Only use Carvin recommended rigging accessories, which are specifically designed for their intended purpose. Do not use Carvin Sure-Fly™ rigging with other types or brands of loudspeakers. This practice may compromise safety standards and Carvin will not be responsible for damage or injury as a result.

Do not modify the rigging accessories, or use them in any other way than described in this user manual. Rigging components supplied as part of a complete assembly are non-interchangeable and must not be exchanged with the component parts of any other assembly. The component parts of Carvin SureFly™ rigging accessory must only be assembled using the fasteners and methods of assembly recommended in this manual. The use of fasteners and methods of assembly not specified or approved by Carvin may result in an unsafe rigging assembly. Welding, or any other means of permanently fixing rigging components to each other or to cabinet fixing points, is not recommended.

Rigging assemblies must only be assembled using the appropriate parts and fixings as specified in this manual using the specific mounting instructions. Rigging components or assemblies must only be fixed to Carvin loudspeaker cabinets using the cabinet fixing points, assembly methods and fasteners specified in this manual and the specific mounting instructions.

Walls, floors or ceilings must be capable of safely and securely supporting the actual load.

The rigging accessory used must be safely and securely fixed both to the loudspeaker and to the wall, floor or ceiling.

When mounting rigging components on walls, floors or ceilings ensure that all fixings and fasteners used are of an appropriate size and load rating. Wall and ceiling claddings, and the construction and composition of walls and ceilings, all need to be taken into account when determining whether a particular fixing arrangement can be safely employed for a particular load. Cavity plugs or other specialist fixings, if required, must be of an appropriate type and must be fitted and used in accordance with the makers instructions. Use only the rigging accessory fixing holes indicated in this manual and the specific mounting instructions to fix Carvin SureFly™ rigging accessories to walls, floors or ceilings.

Where specified, the recommended maximum torque settings for screw fasteners must be strictly complied with.

#### Secondary Safeties

Best practice dictates in addition to the principle load bearing means of suspension, that all loudspeakers flown in theaters, studios or other places of work and entertainment should (and where local laws apply), be provided with an independent, properly rated and securely attached secondary means of safety. Only steel wire ropes or steel chains of an approved construction and load rating may be used as secondary safeties. Plastic covered steel wire ropes are not permitted for use as secondary safeties.

#### Safety Inspections

Carefully inspect rigging systems components and cabinets for defects or signs of damage before proceeding to assemble a flown array. If any parts are damaged or suspect, DO NOT USE THEM.

Regular and more rigorous test and inspection of rigging components must also be carried out. Safety legislation, and test and inspection requirements, will vary from country to country. In most cases, annual independent test and inspection by a suitably approved and qualified inspector will be required. Users must ensure compliance with all applicable safety requirements. Carvin recommends regular safety inspections and further recommends that a logbook be kept detailing the test and inspection history of each Carvin rigging Component. Always wear protective head-wear, footwear and eye protection in accordance with local regulations. Anyone involved in flying ANY sound system, especially in a touring capacity, should take note of the following advice:

"The rigging of a flown sound system may be dangerous unless undertaken by qualified personnel with the required experience and certification to perform the necessary tasks. Fixing of hanging points in a roof should always be carried out by a professional rigging specialist and in accordance with the local rules of the venue. The house rigger and/or building manager must always be consulted."

# Stacking Array without hardware

Each TRx3210 features durable feet and align to interlock without the need for additional hardware. This is ideal for stacking on top of a ground-stacked subwoofer or elevated using two SS4 poles.









# Stacking with hardware

The SureFly $^{\text{m}}$  hardware can also be utilized for ground stacking. The SureFly $^{\text{m}}$  T-bar can be used as a base for a ground stacked array.

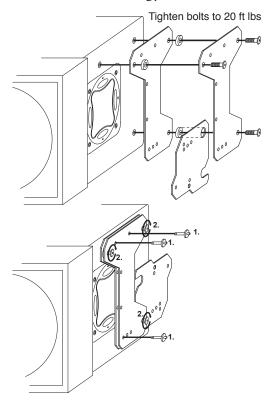
# Assembling an Array

Assembly and deployment of TRx3210 arrays are carried out one array module at a time or in pre assembled groups of array modules. After installing the SureFly™ hardware kit to each enclosure, attach the T-bar to the top array enclosure. The TRx3210F comes with preinstalled SureFlyTRx hardware. Each subsequent enclosure can be pinned at different angles to accomplish wide vertical coverage angles and focus sound energy where needed.

# Step 1 (skip with TRX3210F preinstalled hardware) Installing the SureFlyTRx rigging kit.

Each enclosure will require one SureFlyTRx rigging kit. The kit includes all mounting hardware and quick release pins. Drilling into the TRx3210 enclosure is not required. All mounting points on the TRx3210 enclosure have threaded inserts.

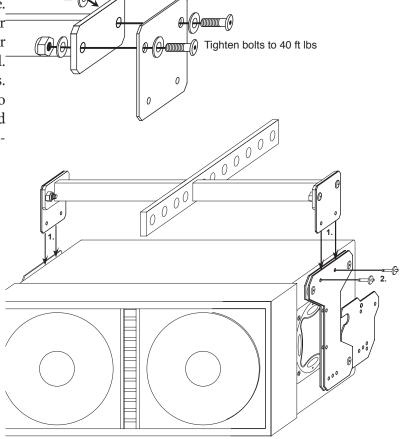
Set all quick release pins aside. As shown in the diagrams, assemble the side panels of the SureFlyTRx kit using the included bolts and washers. Insert the adjustment plate in-between the two mounting plates. The lower bolt will function as a hinge. Hand tighten the bolts and insert the quick release pins as shown. Once the side plates are aligned by installing the Quick Release Pins into the positions shown, use a torque wrench to tighten the bolts to 20ft. lbs. Repeat this proceedure on the other side of the enclosure. After the SureFlyTRx hardware has been installed on all enclosures, they may be stacked 4 high by making sure both side adjustment plates slide in-between the mounting plates of the enclosure below. Store pins in the handle area after installation.



# Step 2 Installing the T-Bar

Attach assembled T-Bar to first (top) array enclosure. At the same time lower side plates of the T-Bar evenly into the SureFly hardware. Attach the T-Bar side plates using the bolts, washers and nuts supplied. Using a torque wrench, tighten the bolts to 40ft lbs. The T-bar side plates must insert between the two plates of the array module hardware. Align holes and secure with the included four (2 per side) quick release pins into both (A) and (B) holes.





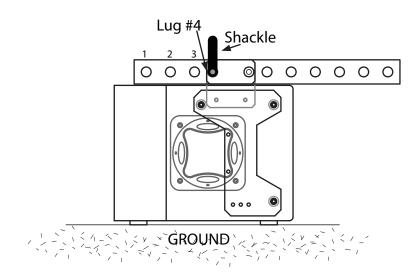
## Step 3 Installing the Shackle

Attach rated 5/8" shackle to lug # 4. Note: this position sets a basic starting point for a straight vertical hang.



Finger tighten shackle only. Do not use a tool to tighten

# Straight Vertical Hang



# Step 4 Adding additional enclosures

Attach a rated chain motor or hoist hook to the shackle. Using the chain motor or hoist, lift assembly up to clear another array module. Place an array module underneath the first array module assembly and lower suspended array module. As you are lowering, align so feet mate with foot receptacles on top of lower array module. Side adjustment plates must insert between the two plates of the array module hardware. See Step 5 for adjustment plate.

#### Quick Release Pin

Press the button on the top of the pin with thumb to insert and remove pin.

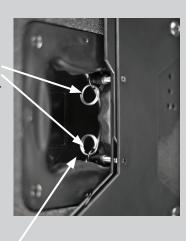




# Attach to motor hoist

#### Pin Storage

The quick-release pins can be stored in the handles on the inside of the SureFly hardware plates on each side of the array module. This keeps them from being misplaced or damaged during transport and holds the inner adjustment plate from swinging down.

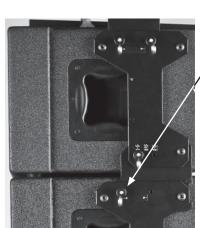


# A 2.5° B 7.5° B 7.5°

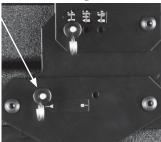
## Step 5

Remove the lower quick-release pin from the handle storage location to release the adjustment plate. Allow the adjustment plate to swing down between the two side plates on the lower enclosure. Adjust enclosures to allow adjustment plate to capture the lower enclosure with hook on adjustment plate.

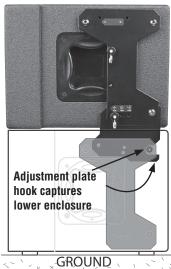
When the adjustment plate is fully in place, the "A" location pin can be inserted. Repeat on opposite side of array enclosure.







GROUND



Step 6

Push the second quick-release pin into forward hole labeled (A  $0^{\circ}$ ) on the upper enclosure. Repeat on opposite side of array enclosure. This 0 degree position is used for a straight Line-Array. This is also storage and transport position when using the DB3210 dolly board.



#### Step 6 continued

If you require a J curve at the bottom of a long array or a curve array, adjust the pins on the lower enclosures to create the desired curve. There are 6 different angles that can be achieved between each enclosure by changing both pin positions. With the lower enclosure in the "A" position, the upper enclosure's pin positions/angles are: 0, 2.5, 5 degrees. When adjusting angle pin, lower the front of the bottom cabinet to the desired angle.





2.5 degree Pin position



5 degree Pin position



With the lower cabinet in the "B" position the upper enclosure's angle pin positions/angles are: 7.5, 10, 12.5 degrees. Caution when adjusting pin "A" or "B". Support the weight of the lower enclosure. Do not adjust pin "A" or "B" with additional enclosures attached below. This pin locks the adjustment plate to the lower enclosure.

7.5 degree Pin position



10 degree Pin position



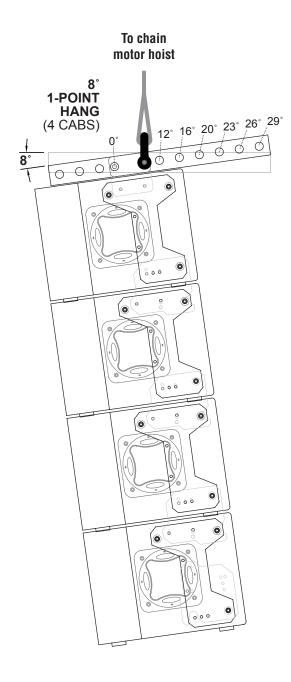
12.5 degree Pin position

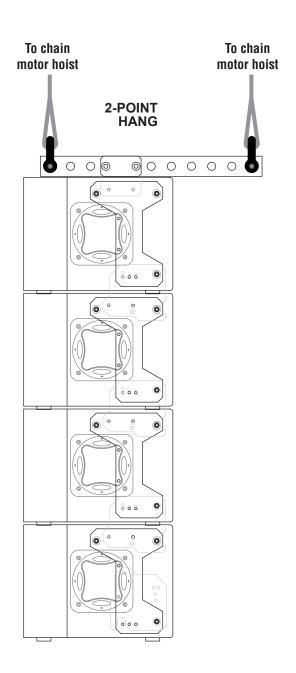


# **T-Bar Hang Points**

To change the angle of the array, attach the shackle to the different lug holes as shown in the below diagram. The further back from center, a larger degree of forward tilt is achieved.

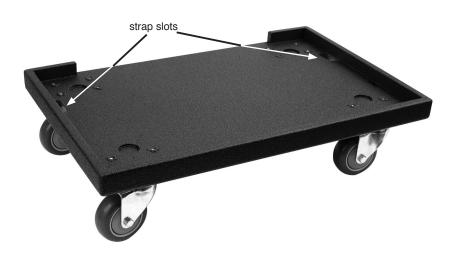
By using two hang points and two chain motor hoists, the angle of the array can be changed by raising or lowering the front or back of the array by adjusting the chain motors. This requires the use of a second shackle as shown in the diagram below.





# DB3210 Transport Dolly Board (optional)

The optional Baltic Birch/Duratec™ DB3210 transport Dolly Board allows a block of up to four TRx3210 speaker cabinets to be conveniently transported in a pre-rigged configuration and is recommended as the most efficient way to truck and handle the cabinets. The transport dolly board is wide enough to allow the lock pins to be inserted in the SureFly™ hardware while on the dolly board, which makes it possible to lift the block of four cabinets together while still being dimensioned to fit up to five-across for a standard truck pack.





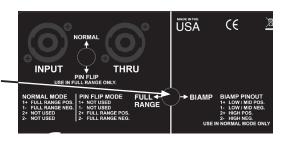


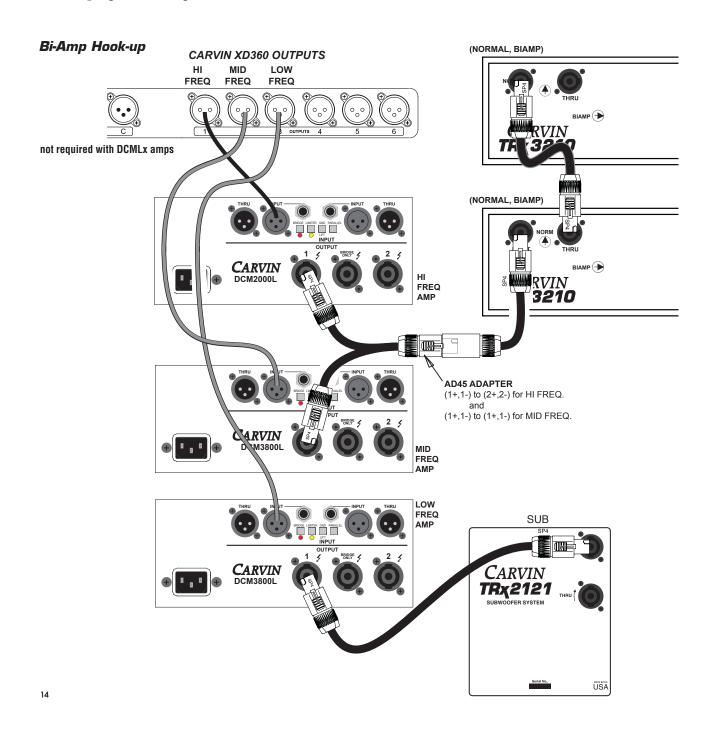
# Full Range or Bi-Amp Configuration

Trx3210 Enclosures can be configured either in full range/passive mode or bi-amped 3-way mode. They ship from the factory as standard in full range/passive mode. Selecting from one to the other is as simples as flipping a concealed switch on the connection panel.

#### Bi Amp Operation:

Remove rubber plug marked Full Range/ BiAMP from connection panel. Using a small flat-head screw driver, carefully insert screwdriver into opening and slide switch to the right-for Bi-Amp operation. Note: Mode switch must always be in the UP (normal) position for Bi-Amp operation. Replace rubber plug after change.

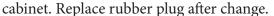


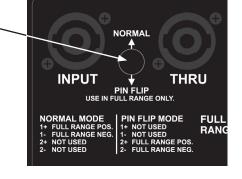


#### Pin Flip Switch

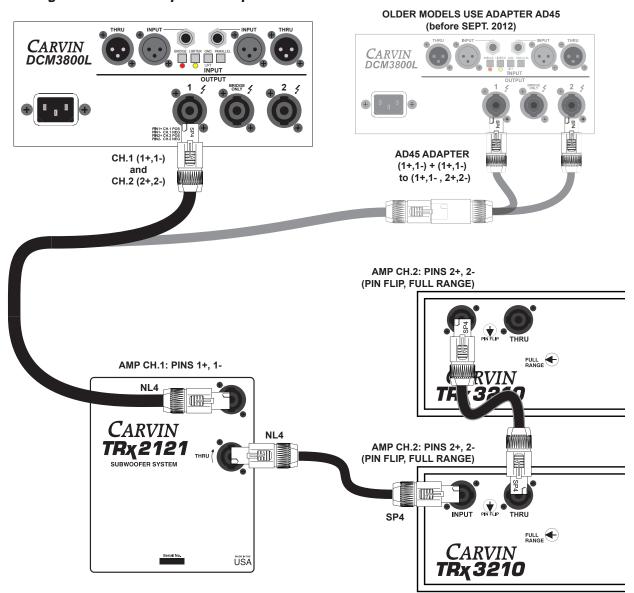
Carvin TRx3210 loudspeakers come with a speaker pin flip switch. In full range/passive mode, this switch allows the user to select operation from either pins 1+ & 1- (standard) or pins 2+ & 2-. This can significantly simplify speaker cable runs by half with 4-pin TwistLoc cables. Below are a few examples of how the pin flip switch is used.

Remove rubber plug marked NORMAL/ PIN FLIP from connection panel. Using a small flat-head screw driver, carefully insert screwdriver into opening and slide switch to the down position for Pin Flip operation. This will enable use of pin 2+ & 2- to drive this speaker module. Note: pins 1+ & 1- will be no longer used in this

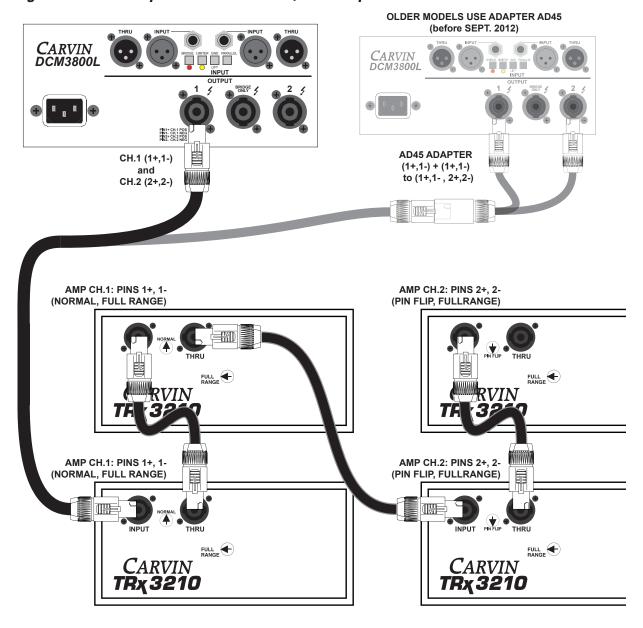




Full-Range Passive Hook-up in Pin Flip Mode



#### Full-Range Passive Hook-up 2 normal Pin Mode, 2 Pin Flip Mode



#### Processor Settings for XD360, DCMLx or other speaker management systems

For optimum performance, a loudspeaker management processor is recommended. Carvin offers both an outboard processor such as the XD360 X-Drive™ as well as the DCMLx power amps that have on-board X-Drive™ processing. Carvin's XD360 and DCMLx power amps will have the TRx3210 crossover settings as a preset. The following charts provide a variety of settings that cover both full-range and bi-amping. The below settings apply to all speaker management systems.

Stereo passive 2 array modules pole mounted on sub

Stereo passive 2 array modules pole modified on sub							
	LEFT TWO ON SUB		RIGHT TWO ON SUB				
	Main (ch1)	N/A (ch2)	SUB (ch3)	Main (ch1)	N/A (ch5)	SUB (ch6)	
Output Gain	-3dB		0.0 dB	-3dB		0.0 dB	
Input Source	А		A, A+B or	В		B, A+B or	
(Alt Source)			(C for Aux sub)	(A for 8 mono)		(C for Aux sub)	
Polarity	OUT		IN	OUT		IN	
LPF frequency	20 KHz		80Hz	20 KHz		80Hz	
LPF type	OUT		Linkwtz 24	OUT		Linkwtz 24	
HPF frequency	80 Hz		32 Hz	80 Hz		32 Hz	
HPF type	Linkwtz 24		Butter 18	Linkwtz 24		Butter 18	
Limit Threshold	0dB		0dB	0dB		0dB	
<b>Output Delay</b>							
PEQ1 GAIN	6 dB			6 dB			
PEQ1 FREQ	630 Hz			630 Hz			
PEQ1 BW	0.16			0.16			
PEQ2 GAIN	-9 dB			-9 dB			
PEQ2 FREQ	2.7 KHz			2.7 KHz			
PEQ2 BW	0.12			0.12			



#### STEREO Bi Amp 4 array modules 2.5 - 12.5 degrees Curve array

	LEFT FOUR			RIGHT FOUR		
	HI (ch1)	LO-MID (ch2)	SUB (ch3)	HI (ch4)	LO-MID (ch5)	SUB (ch6)
Output Gain	-15 dB	0.0 dB	0.0 dB	-15 dB	0.0 dB	0.0 dB
Input Source	А	А	A, A+B or	В	В	B, A+B or
(Alt Source)			(C for Aux sub)	(A for 8 mono)		(C for Aux sub)
Polarity	OUT	IN	IN	OUT	IN	IN
LPF frequency	20kHz	1.5kHz	80Hz	20kHz	1.5kHz	80Hz
LPF type	OUT	Butter 48	Linkwtz 24	OUT	Butter 48	Linkwtz 24
HPF frequency	1.5 KHz	80 Hz	32 Hz	1.5 KHz	80 Hz	32 Hz
HPF type	Butter 48	Linkwtz 24	Butter 18	Butter 48	Linkwtz 24	Butter 18
Limit Threshold	-3	0	0	-3	0	0
Output Delay	84 uS	0.0 mS	0.0 mS	84 uS	0.0 mS	0.0 mS
PEQ1 GAIN	-6 dB	-9dB		-6 dB	-9dB	
PEQ1 FREQ	2 KHz	315 Hz		2 KHz	315 Hz	
PEQ1 BW	1	0.3		1	0.3	
PEQ2 GAIN	12 dB			12 dB		
PEQ2 FREQ	12 KHz			12 KHz		
PEQ2 BW	3			3		



Stereo passive 4 array modules 2.5 - 12.5 degree Curve array

		pareers,		izio dograd dai	<b>,</b>	
	LEFT (OR UPPER) FOUR			RIGHT (OR LOWER)		
	Main (ch1)	not used (ch2)	SUB (ch3)	Main (ch3)	not used (ch5)	SUB (ch6)
Output Gain	0		0.0 dB	0		0.0 dB
Input Source	А		A, A+B or	В		B, A+B or
(Alt Source)			(C for Aux sub)	(A for 8 mono)		(C for Aux sub)
Polarity	OUT		IN	OUT		IN
LPF frequency	20 KHz		80Hz	20 KHz		80Hz
LPF type	OUT		Linkwtz 24	OUT		Linkwtz 24
HPF frequency	80 Hz		32 Hz	80 Hz		32 Hz
HPF type	Linkwtz 24		Butter 18	Linkwtz 24		Butter 18
Limit Threshold	0dB		0dB	0dB		0dB
Output Delay						
PEQ1 GAIN	6 dB			6 dB		
PEQ1 FREQ	630 Hz			630 Hz		
PEQ1 BW	0.16			0.16		
PEQ2 GAIN	-9 dB			-9 dB		
PEQ2 FREQ	2.7 KHz			2.7 KHz		
PEQ2 BW	0.12			0.12		

Also works for 8 module passive mono hang using right as upper and left as lower.



4 enclosure Curve Array

Bi Amp 8 array modules straight hang

	UPPER FOUR	-		LOWER FOUR ("J curve settings)		
	HI (ch1)	LO-MID (ch2)	SUB (ch3)	HI (ch4)	LO-MID (ch5)	SUB (ch6)
Output Gain	-9 dB	0.0 dB		-9 dB (-15db)	0.0 dB	0.0 dB
Input Source	А	А	not used	А	А	А
(Alt Source)						(C for Aux sub)
Polarity	OUT	IN		OUT	IN	IN
	20kHz	1.5kHz		20kHz	1.5kHz	80Hz
LPF frequency	OUT	Butter 48		OUT	Butter 48	Linkwtz 24
LPF type	1.5 KHz	80 Hz		1.5 KHz	80 Hz	32 Hz
HPF frequency	Butter 48	Linkwtz 24		Butter 48	Linkwtz 24	Butter 18
HPF type						
	-3	0		-3	0	0
Limit Threshold	84 uS	0.0 mS		84 uS	0.0 mS	0.0 mS
Output Delay						
	-6 dB	9 dB		-6 dB	9 dB (0db)	
PEQ1 GAIN	2 KHz	400 Hz		2 KHz	400 Hz	
PEQ1 FREQ	1	0.12		1	0.12	
PEQ1 BW						
	12 dB			12 dB	(-9dB)	
PEQ2 GAIN	12 KHz			12 KHz	(315 Hz)	
PEQ2 FREQ	3			3	(0.3)	
PEQ2 BW	0.12			0.12		

Lower four cabinets can be adjusted for "J" curve see settings.





8 enclosure Line Array

# Turnkey Factory Assembled Amp Racks

#### **AR AMP RACKS**

#### DCM-L Amps & XD360 Processor

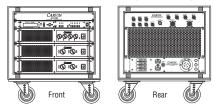
Configured for minimum of 4 ohm operation per amplifier channel.

#### **ARX AMP RACKS**

#### DCM-Lx DSP Amps (XD360 not required)

Configured for minimum of 4 ohm operation per amplifier channel.

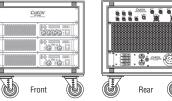
#### ARP-MAIN-BI Amp Rack (6,600 Watts)



#### ARP-MAIN-BI (Biamp)

- (1) DCM2004L<sup>†</sup>
- (2) DCM3800L (1) XD360 Processor
- (1) IP340 Connect Panel
- (1) C2U USB 2ft cable
- (8) C3XLR 3ft cable
- (1) 1U Blank Panel
- (1) 411 Vented Panel (1) AR1 Shock Rack Case
- (1) AR-ASSM Assembled Rack
- (1) AR-PROG Program / Test
- (1) AC3PH120 AC Panel\*
- \*AR-MAIN-RI without AC3PH120 \*†AR-MAIN (passive) without DCM2004L
- & AC3PH120

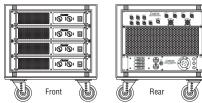
#### ARPx-MAIN-BI Amp Rack (6,600 Watts)



#### ARPx-MAIN-BI (Biamp)

- (1) DCM2004Lx<sup>†</sup> (2) DCM3800Lx
- (1) IP340 Connect Panel
- (1) USB12HUB (3) C2U USB 2ft cable
- (4) C3XLR 3ft cable
- (1) 2U Blank Panel
- (1) 411 Vented Panel
- (1) AR1 Shock Rack Case
- (1) AR-ASSM Assembled Rack
- (1) AR-PROG Program / Test
- (1) AC3PH120 AC Panel\*
- ARx-MAIN-BI without AC3PH120
- \*†ARx-MAIN (passive) without DCM2004Lx
- & AC3PH120

#### AR-S Sub Amp Rack (15,200 Watts)



IP340 XLR Rear

 $\overline{\bigcirc}$ 

#### ARP-S (Sub)

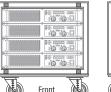
- (4) DCM3800L (bridged)
- (1) IP340 Connect Panel (1) C2U USB 2ft cable
- (4) C3XLR 3ft cable
- (1) 4U Vented Panel
- (1) AR1 Shock Rack Case
- (1) AR-ASSM Assembled Rack

OUTPUT 1

OUTPUT 1 & 2

- (1) AR-PROG Program / Test (1) AC3PH120 AC Panel\*
- \*AR-S without AC3PH120

#### ARX-S Sub Amp Rack (15,200 Watts)





#### ARPx-S (Sub)

- (4) DCM3800Lx (bridged)
- (1) IP340 Connect Panel (1) USB12HUB
- (4) C2U USB 2ft cable
- (4) C3XLR 3ft cable
- (1) 4U Vented Panel
- (1) AR1 Shock Rack Case
- (1) AR-ASSM Assembled Rack
- (1) AR-PROG Program / Test
- (1) AC3PH120 AC Panel\* \*ARx-SUB without AC3PH120

To power amps

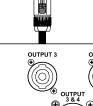












To power amps

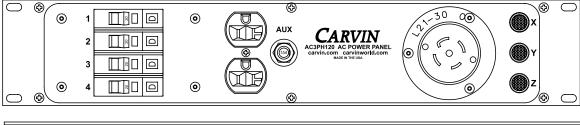


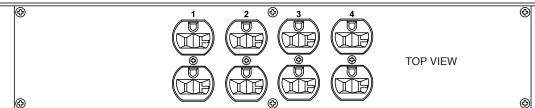


- IP340 2U Interconnect XLR inputs and TwistLoc outputs Fast and easy connections to rack gear
- Built-in rear TwistLoc cables connect to power amps Front USB to computer, rear to USB hub

**USB12HUB** 12 port hub

#### MADE IN USA





- AC3PH120 2U AC power panel for 100-130VAC 50-60Hz Saftey approvals ETL listed to UL standards.
- Designed for safe connections to the rack gear & house power. For use in other countries with approved adapters.
- 3 phase 120VAC/208VAC Each phase (leg) supports one 20 amp breaker (3rd & 4th breaker on leg 3)

# Components:

TRx3210 Main Enclosure

**TRx3210F** Main Enclosure with SureFly™ hardware preinstalled

**SUREFLYTRx** Optional side connecting fly hardware. One kit required per array enclosure. Includes 4 Quick Release Pins

SUREFLYTBAR Optional T-Bar suspension kit. One required per array. Hang up to 16 array modules. Includes 4 Quick Release Pins

TCSHK58 Anchor Pin Shackle 5/8" rated lifting shackle

#### Accessories:

**SureFlypin** Extra Quick Release Pins

IP340 XLR/TwistLoc 2U interconnect panel with TwistLoc cables

AC3PH120 120v, 3-phase AC distribution panel

**DB3210** Baltic Birch/Duratec<sup>TM</sup> transport dolly for up to four array modules

PR050TL-8 50 ft. NL8 Speaker cable 12 gaugePR0100TL-8 100 ft. NL8 Speaker cable 12 gauge

**PRO018TL** 18" NL4 Speaker jumper cable 12 gauge

PRO25TL 25 ft NL4 Speaker Cable 12 GaugePRO50TL 50 ft NL4 Speaker Cable 12 Gauge

AD48 NL8 to (2) NL4 Y breakout

NL8MMX NL8 male to male barrel connector
TRx-3X Tri-Amp Only NL8 input Panel

#### Carvin Pro Audio Products - Warranty Information

The Carvin warranty on the professional TRx3000 series loudspeaker products remains in effect for five years from the date of the first consumer purchase. Carvin DCM series power amplifiers are warranted for three years from the date of original purchase. All all other Carvin products are warranted for one year from the date of original purchase.

#### WHO IS PROTECTED BY THIS WARRANTY?

Your Carvin TRx3210 warranty protects the original owner for five years so long as: A.) Your product has been purchased from Carvin. B) The original dated sales invoice is presented whenever warranty service is required.

#### WHO PAYS FOR WHAT?

Carvin pays for all material expenses related to defective workmanship including drivers and crossovers. However, Carvin does not pay for any driver with an open voice coil, rubbing voice coil, or drivers, which the owner may claim to be weak, which in all cases is an indication that excessive power has been used.

#### WHAT DOES THE CARVIN WARRANTY COVER?

Except as specified, your Carvin Warranty covers all defects in material and workmanship. The following are not covered: Damage caused by accident, misuse, abuse, product modification or neglect; damage occurring during shipment; damage resulting from failure to follow instructions contained in your Instruction Manual; damage resulting from the performance of repairs by someone not authorized by Carvin; claims based upon any misrepresentations by the seller; any Carvin product on which the serial number has been defaced, modified or removed.

#### WARRANTY INFORMATION

If your Carvin product needs service, email service@carvin.com or export@carvin.com for international customers. Please do not ship your Carvin product to the factory without prior authorization. You are responsible for shipping charges.

# Turnkey Systems:

#### TRS300 Full Range - Tri-amp optional

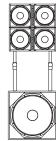
300 Person Plus System

- (4) TRx3210 Array Modules
- (2) TRx2121 Subwoofers
- (4) SS4 Poles
- (1) ARx-MAIN Amp Rack
- (2) PR0018TL
- (2) PR05TL
- (2) PR050TL

spare cable package

TRS300-CBL (for active & passive)

- (2) PR0018TL
- (2) PR05TL
- (2) PR050TL





#### TRS1000 Full Range

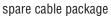
1000 Person Plus System

- (8) TRx3210F Array Modules
- (4) TRx2218 Subwoofers
- (1) ARx Main Amp Rack
- (1) ARx SUB Amp Rack
- (6) PR0018TL
- (2) PR050TL

#### TRS1000T Tri-amp

1000 Person Plus System

- (8) TRx3210F Array Modules
- (4) TRx2218 Subwoofers
- (1) ARx-MAIN-BI Amp Rack
- (1) ARx SUB Amp Rack
- (4) PRO018TL
- (2) PRO50TL-8
- (4) PR050TL
- (2) AD48



#### TRS1000B-CBL

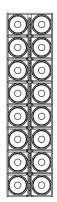
- (4) PR0018TL
- (2) PR050TL-8
- (4) PR050TL
- (2) AD48











#### TRS2500 Full Range

2500 Person Plus System (16) TRx3210F Array Modules

- (8) TRx2218 Subwoofers
- (2) ARx Main Amp Rack
- (2) ARx SUB Amp Rack
- (12) PR0018TL
- (12) PR050TL

# TRS2500T Tri-amp

2500 Person Plus System

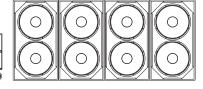
- (16) TRx3210F Array Modules
- (8) TRx3218 Subwoofers\*
- (2) ARPx-MAIN-BI Amp Rack
- (2) ARPx SUB Amp Rack
- (8) PR0018TL
- (4) PR050TL-8
- (8) PR050TL
- (4) AD48

spare cable package

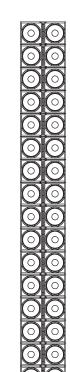
#### TRS2500B-CBL

- (8) PRO018TL
- (4) PR050TL-8
- (8) PR050TL
- (4) AD48

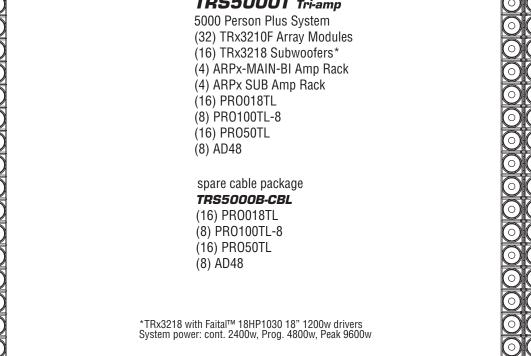


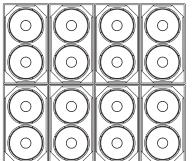






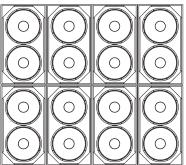
# TRS5000T Tri-amp













# **CARVIN**

# 800.854.2235 carvinproaudio.com

USA contact: Tony Mirador Office: 800.403.4484 x114 tonym@carvin.com International contact: Joel Kiesel Office: 760.522.5676 export@carvin.com

12340 World Trade Dr., San Diego, CA 92128