

FNX1404  
FNX1504  
FNX1604F  
FNX1604



operation &  
installation

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Great product and competent installations are only a piece of the puzzle when it comes to your system. Make sure that your installer is using 100% authentic installation accessories from Connecting Punch in your installation. Connecting Punch has everything from RCA cables and speaker wire to Power line and battery connectors. Insist on it! After all, your new system deserves nothing but the best.

To add the finishing touch to your new Rockford Fosgate image order your Rockford wearables, which include everything from T-shirts and jackets to hats and sunglasses.

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CONTINUOUS EXPOSURE TO SOUND PRESSURE LEVELS OVER **100 B** MAY CAUSE PERMANENT HEARING LOSS. HIGH POWERED AUTOSOUND SYSTEMS MAY PRODUCE SOUND PRESSURE LEVELS WELL OVER **130 B**. USE COMMON SENSE AND PRACTICE SAFE SOUND.

If, after reading your manual, you still have questions regarding this product, we recommend that you see your Rockford Fosgate dealer. If you need further assistance, you can call us direct at 1-800-669-9899. Be sure to have your serial number, model number and date of purchase available when you call.

The serial number can be found on the outside of the box. Please record it in the space provided below as your permanent record. This will serve as verification of your factory warranty and may become useful in recovering your product if it is ever stolen.

Serial Number: \_\_\_\_\_

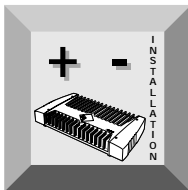
Model Number: \_\_\_\_\_

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## GETTING STARTED

Welcome to Rockford Fosgate! This manual is designed to provide information for the owner, salesperson and installer. For those of you who want quick information on how to install this product, please turn to the **Installation Section** of this manual or refer to the icons listed below. Other information can be located by using the Table of Contents. We, at Rockford Fosgate, have worked very hard to make sure all the information in this manual is current. But, as we are constantly finding new ways to improve our product, this information is subject to change without notice.



Sections marked **INSTALLATION** include “slam dunk” wiring connections



Sections marked **TROUBLESHOOTING** include recommendations for curing installation problems

# Introduction

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This manual provides information on the features and installation of the **Fanatic X** Midrange. We suggest you save this manual for future reference.

We strongly recommend you have your Authorized Rockford Fosgate Dealer install the **Fanatic X** Midrange. If you do choose to install the system yourself, please be sure to read the entire manual before beginning.

## PACKAGE CONTENTS

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### **FNX1404**

- (2) FNX1404 4" Midrange Speakers
- (2) 4" Speaker Grilles
- (2) 4" Speaker Grille Rings
- (2) "RF" Speaker Grille Logos
- (8) #8 x 1.25 Phillips Screws
- (2) .110 Female Fast-on Connectors
- (2) .187 Female Fast-on Connectors
- (20') 18 Gauge Speaker Wire

### **FNX1504**

- (2) FNX1405 5<sup>1</sup>/<sub>4</sub>" Midrange Speakers
- (2) 5<sup>1</sup>/<sub>4</sub>" Speaker Grilles
- (2) 5<sup>1</sup>/<sub>4</sub>" Speaker Grille Rings
- (2) "RF" Speaker Grille Logos
- (8) #8 x 1.25 Phillips Screws
- (2) .110 Female Fast-on Connectors
- (2) .187 Female Fast-on Connectors
- (20') 18 Gauge Speaker Wire

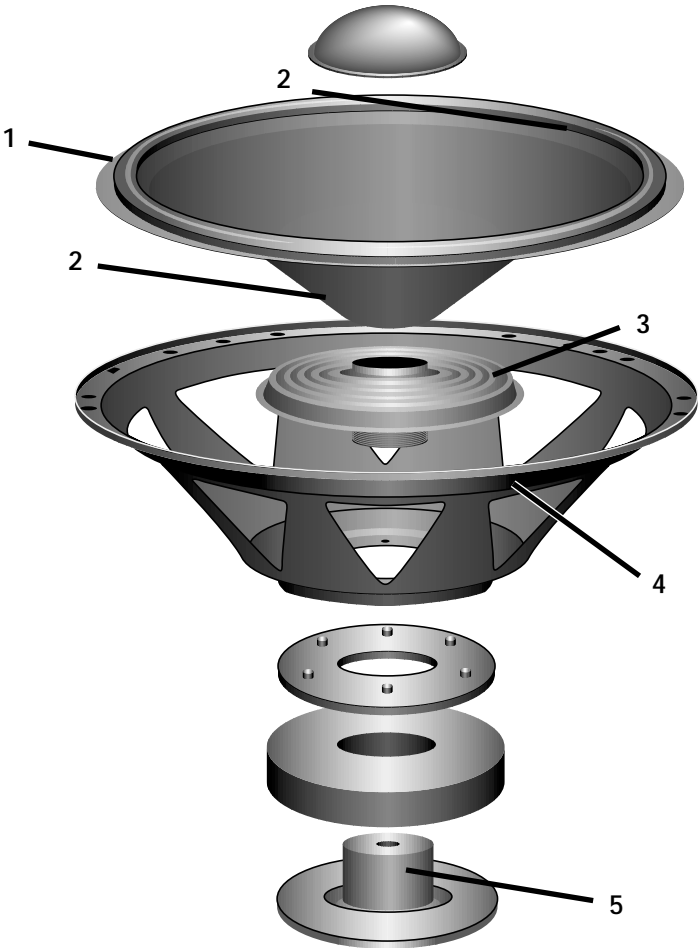
### **FNX1604F**

- (2) FNX1406F 6" Midrange Speakers
- (2) 6" Speaker Grilles
- (2) 6" Speaker Grille Rings
- (2) "RF" Speaker Grille Logos
- (8) #8 x 1.25 Phillips Screws
- (2) .110 Female Fast-on Connectors
- (2) .187 Female Fast-on Connectors
- (20') 18 Gauge Speaker Wire

### **FNX1604**

- (2) FNX1406 6<sup>1</sup>/<sub>2</sub>" Midrange Speakers
- (2) 6<sup>1</sup>/<sub>2</sub>" Speaker Grilles
- (2) 6<sup>1</sup>/<sub>2</sub>" Speaker Grille Rings
- (2) "RF" Speaker Grille Logos
- (8) #8 x 1.25 Phillips Screws
- (2) .110 Female Fast-on Connectors
- (2) .187 Female Fast-on Connectors
- (20') 18 Gauge Speaker Wire

DESIGN FEATURES



## DESIGN FEATURES

### Midrange

1. **Rubber Surround** – The durable rubber surround withstands the extremes of the automotive environment. It also improves sound quality by reducing 2nd and 3rd order harmonics and provides wider frequency response.
2. **Mica Filled Polypropylene Cone** – The ideal cone material would be infinitely strong, very light and would have very high damping to ensure great sound quality. The Fanatic X midrange drivers use a mica filled polypropylene cone that is strong, light and has high internal damping to provide excellent reproduction of sound.
3. **Cupped Spider** – The spider has the job of centering the voice coil and providing the rear suspension for the speaker. The Fanatic X midrange drivers use a durable cupped spider to ensure great sound with long life and durability.
4. **Large 1" Voice Coil with Anodized Aluminum Former** – Just like all Rockford Fosgate woofers, all Fanatic midrange drivers use an aluminum voice coil former for more efficient dissipation of heat. Dissipating the heat is key to long life and high power handling, so go ahead and crank it up!
5. **Vented Pole Piece** – The pole piece extends from the back of the speaker into the voice coil area. The Fanatic X midrange drivers use a vented pole piece to allow cool air to circulate in the voice coil gap which allows greater power handling and increased reliability.

# **INSTALLATION CONSIDERATIONS**

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## **Tools Needed**

The following is a list of some of the tools necessary for the installation of your speakers.

Power Drill with assorted bits	#2 Phillips Screwdriver
Tape Measure	Voltmeter

## **General**

1. For safety, disconnect the negative lead from the battery prior to beginning the installation.
2. Never run wires underneath the vehicle. Running the wires inside the vehicle provides the best protection.
3. Avoid running wires over or through sharp edges. Use rubber or plastic grommets to protect any wires routed through metal.
4. Mount the speakers away from electrical sources (other than the amplifier) i.e., power cables, electronic fuel pumps, vehicle computers, and other potential noise sources.
5. Mount the speakers away from areas of extreme heat or moisture.

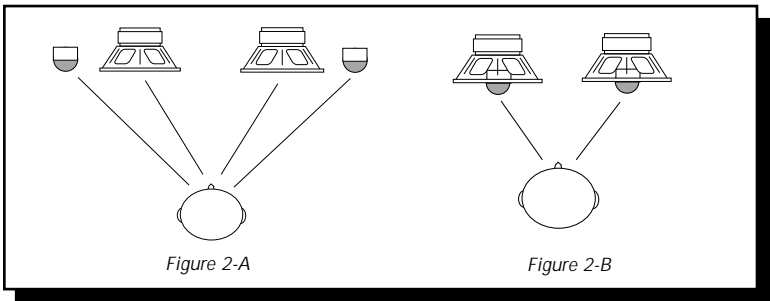
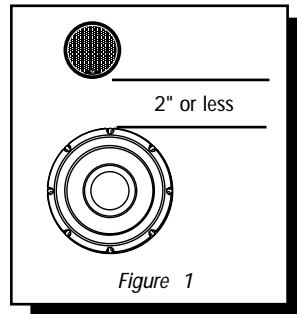
## **Speakers**

1. Make sure there is an area large enough for the speaker to mount. **Warning!** Failure to do this can cause damage to the speaker if the speaker frame is bent during installation.
  2. Check to see that the location is deep enough for the speaker(s) and the location does not interfere with the normal operation of the vehicle.
  3. When mounting the speaker(s) in the door of a vehicle, make sure the speaker(s) do not interfere with either the door or window operation.
  4. When mounting the speaker(s) on the rear deck of the vehicle, check the operation of the rear hatch or trunk lid. Make sure the torsion bars and other moving parts are not obstructed by the speaker(s) installation.
- Please refer to the Specifications section of this manual for proper mounting diameter and depth of the speaker(s).

# MOUNTING LOCATION

A solid front stage with a good image is one of the most difficult tasks to achieve in a vehicle. No car has the optimum listening environment. This makes proper sound staging very difficult to accomplish. Most speakers tend to be placed where they will fit easily, as opposed to where they can perform the best. *The mounting location of your speakers will have a great effect on the sound quality of your stereo system. The special care taken to place the speakers will yield many hours of listening enjoyment in return. Several important recommendations should be followed.*

- Place the speakers where they have a direct path to the listening area.
- For the best integration between the midrange and tweeter, the tweeter should be placed less than 2" from the midrange. (Figure 1)
- If you cannot place the tweeter less than 2" from the midrange, then place the tweeter more than 7" from the midrange. Placing the tweeter 2"-7" from the midrange can cause destructive interference (frequency response problems) which will affect the speaker's ability to reproduce the frequency range around the crossover frequency of the system.
- Whenever possible, place the tweeter directly above or below the midrange as this maximizes the imaging (point source) capability of the speakers. (Figure 2)

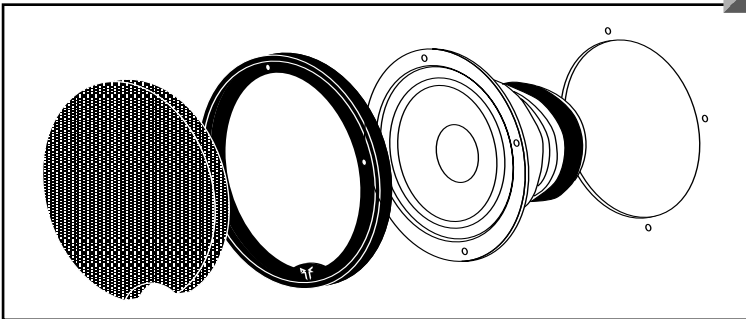




- Sound radiated from a “point source” has the most optimum stereo imaging because the separation of the acoustical centers between the midrange and tweeter for each channel is at the optimum. Figure 2-A describes a horizontal speaker alignment. In a closed environment such as an automobile, horizontal speaker alignment can cause severe amplitude and phase differences which will degrade not only the imaging, but also the frequency response. This is due to the path length differences between the midrange and tweeter. Figure 2-B displays a vertical alignment between the midrange and tweeter. With a vertical alignment, the path length difference between the midrange and tweeter are reduced to a minimum. The result is a negligible difference in path lengths between the midrange and tweeter regardless of the proximity of the listener to the speakers. Mounting the speaker with minimum path length difference will ensure the best staging and imaging possible from your audio system.

## INSTALLATION

### *Mounting the Midrange*



1. Cut the proper size hole for the midrange/woofer.
  - For the FNX-1404, cut an 90.48mm ( $3\frac{9}{16}$ " ) diameter hole
  - For the FNX-1405, cut a 113.50mm ( $4\frac{15}{32}$ " ) diameter hole
  - For the FNX-1406F, cut a 127mm (5" ) diameter hole
  - For the FNX-1406, cut a 139.06mm ( $5\frac{1}{2}$ " ) diameter hole
2. Place the mounting ring over the mounting hole and mark the location of the screw mounting holes.
3. Remove the ring. Drill the holes for the screws using a 1/8" drill bit.
4. Route the wire through the hole.
5. Attach the wires and be sure to observe the proper speaker polarity.
6. Place the mounting ring over the speaker.
7. Place the speaker into the hole and screw the speaker into place. **Be careful not to bend the speaker frame during this step.**
8. Press the speaker grille into the mounting ring.



Symptom	Diagnosis	Remedy
<b>No sound from speakers</b>	Wires between amplifier, crossover or speakers not connected properly.	Check and repair or replace wiring as needed.
	Amplifier has no output.	Check system with known working amplifier and repair or replace as needed.
	Speaker wires are shorted to each other or to the chassis of the vehicle.	Check for shorts in the wiring with a volt/ohm meter and repair or replace wires as needed
	Speakers are blown.	Check system with known working speaker and repair or replace as needed.
<b>Distorted sound from speakers</b>	Incorrect wiring between crossover and speakers	Check wiring and repair or replace as needed.
<b>Engine noise from one or more speakers</b>	Speaker wires shorted to chassis of vehicle.	Check for shorts in the wiring with a volt/ohm meter and repair or replace wires as needed.
	Speaker wires are routed near radiated noise source. (Power cables, vehicle computers, etc.)	Re-route speaker wiring away from noise sources. (Refer to the Installation Considerations section of this manual.)
	Crossover is mounted near radiated noise source. (Power cables, vehicle computers, etc.)	Move crossovers away from noise sources. (Refer to the Installation Considerations section of this manual.)

# SPECIFICATIONS

Midrange Model Number	FNX1404	FNX1405	FNX1406F	FNX1406
Nominal Diameter	4"	5 <sup>1</sup> / <sub>4</sub> "	6"	6 <sup>1</sup> / <sub>2</sub> "
Nominal Impedance	4Ω	4Ω	4Ω	4Ω
Frequency Response	90Hz-8kHz	60Hz-6kHz	61Hz-6kHz	50Hz-5kHz
Fs (Hz)	90Hz	60Hz	61Hz	50Hz
Qes	.858	.507	.507	.545
Qms	4.363	3.303	3.330	3.508
Qts	.717	.440	.439	.472
Vas (ft <sup>3</sup> /liter)	.08/2.4	.26/7.5	.31/8.8	.72/20.3
Xmax (in/mm)	.11/2.9	.15/3.7	.15/3.7	.15/3.7
Sensitivity	84.8dB	87.4dB	87.9dB	88.4dB
RMS Power Handling*	70 Watts	70 Watts	70 Watts	70 Watts
Mounting Diameter	90.48mm (3 <sup>9</sup> / <sub>16</sub> " )	113.50mm (4 <sup>15</sup> / <sub>32</sub> " )	127mm (5" )	139.06mm (5 <sup>1</sup> / <sub>2</sub> " )
Mounting Depth	54mm (2 <sup>1</sup> / <sub>8</sub> " )	60mm (2 <sup>3</sup> / <sub>8</sub> " )	63mm (2 <sup>15</sup> / <sub>32</sub> " )	65mm (2 <sup>9</sup> / <sub>16</sub> " )

\*Power Ratings (PE) is established with recommended filter network

# LIMITED WARRANTY INFORMATION

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Rockford Corporation offers a limited warranty on Rockford Fosgate products on the following terms:

- **Length of Warranty**

- |                         |  |
|-------------------------|--|
| 1 year on speakers      | 30 days on speaker B-stock (receipt required)    |
| 3 years on electronics  | 90 days on electronic B-stock (receipt required) |
| 2 years on source units |  |

- **What is Covered**

This warranty applies only to Rockford Fosgate products sold to consumers by Authorized Rockford Fosgate Dealers in the United States of America or its possessions. Product purchased by consumers from an Authorized Rockford Fosgate Dealer in another country are covered only by that country's Distributor and not by Rockford Corporation.

- **Who is Covered**

This warranty covers only the original purchaser of Rockford product purchased from an Authorized Rockford Fosgate Dealer in the United States. In order to receive service, the purchaser must provide Rockford with a copy of the receipt stating the customer name, dealer name, product purchased and date of purchase.

- **Products found to be defective** during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at Rockford's discretion.

- **What is Not Covered**

1. Damage caused by accident, abuse, improper operations, water, theft
2. Any cost or expense related to the removal or reinstallation of product
3. Service performed by anyone other than Rockford or an Authorized Rockford Fosgate Service Center
4. Any product which has had the serial number defaced, altered, or removed
5. Subsequent damage to other components
6. Any product purchased outside the U.S.
7. Any product not purchased from an Authorized Rockford Fosgate Dealer

- **Limit on Implied Warranties**

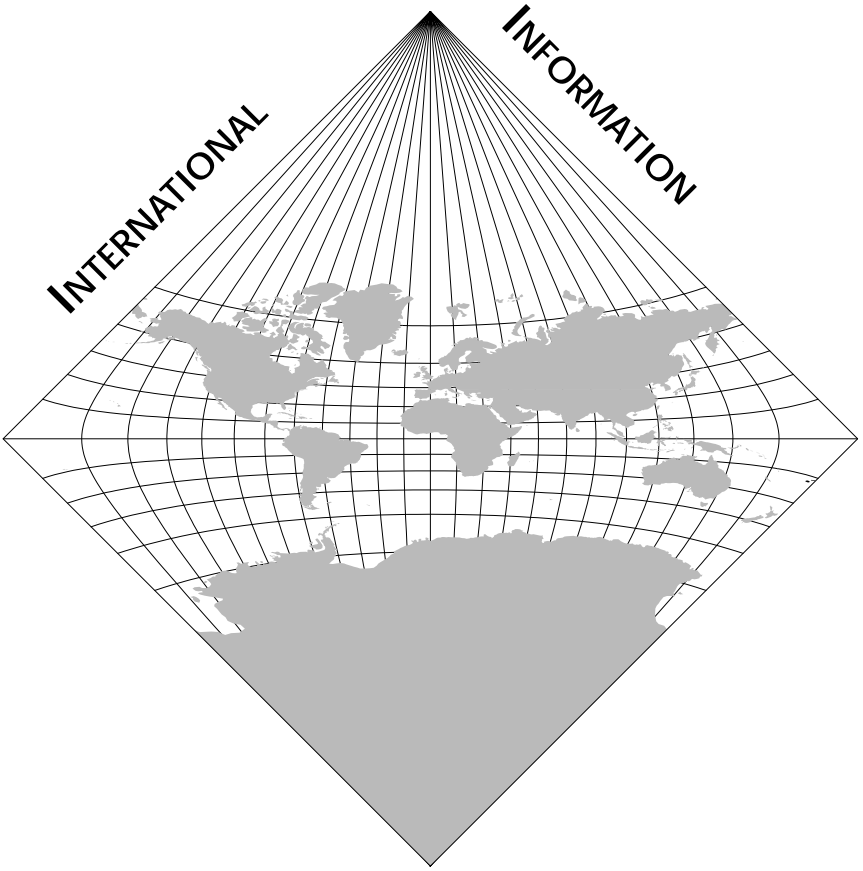
Any implied warranties including warranties of fitness for use and merchantability are limited in duration to the period of the express warranty set forth above. Some states do not allow limitations on the length of an implied warranty, so this limitation may not apply. No person is authorized to assume for Rockford Fosgate any other liability in connection with the sale of the product.

- **How to Obtain Service**

Please call 1-800-669-9899 for Rockford Customer Service. You must obtain an RA# (Return Authorization number) to return any product to Rockford Fosgate. You are responsible for shipment of product to Rockford.

Ship to: **Electronics**  
Rockford Corporation  
Warranty Repair Department  
2055 E. 5th Street  
Tempe, AZ 85281  
RA#: \_\_\_\_\_

Ship to: **Speakers**  
Rockford Acoustic Design  
(Receiving-speakers)  
609 Myrtle N.W.  
Grand Rapids, MI 49504  
RA#: \_\_\_\_\_



**LEA DETENIDAMENTE LAS SIGUIENTES INSTRUCCIONES DE INSTALACIÓN DEL PRODUCTO.**

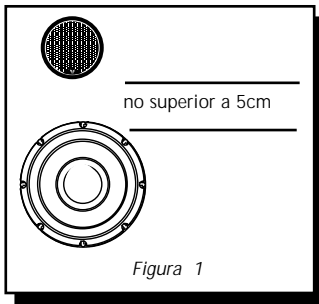
## **INTRODUCCIÓN**

Este manual contiene información sobre la construcción, instalación y funcionamiento de Fanatic X. Le recomendamos que conserve el manual para futuras consultas.

Es preferible que la instalación de Fanatic X sea realizada por un distribuidor autorizado Rockford Fosgate. Si prefiere realizar la instalación usted mismo, asegurese de leer el manual en su totalidad antes de comenzar.

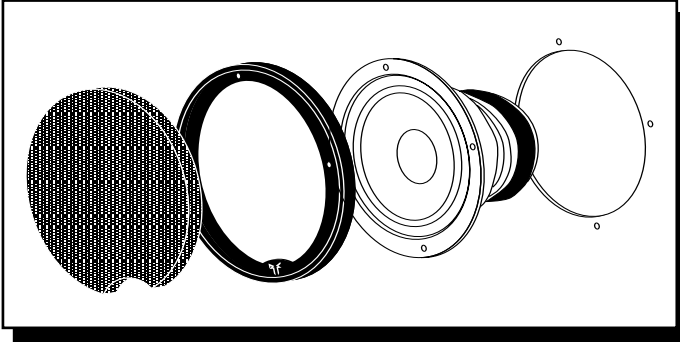
## **MONTAJE**

- Le mejor interacción entre tweeter y medio se consigue si no están separados entre si más de 5 centímetros. (Figura 1)





## Montaje del altavoz de medios



1. Corte el agujero para el medio/woofer.
  - Par el FNX1404, corte un círculo de 90,48mm de diámetro
  - Par el FNX1405, corte un círculo de 113,50mm de diámetro
  - Par el FNX1406F, corte un círculo de 127mm de diámetro
  - Par el FNX1406, corte un círculo de 139,06mm de diámetro
2. Use los anillos de montaje de plástico como plantilla. Marque la posición de los tornillos de anclaje.
3. Quite el anillo y perforo los agujeros con una broca de 3mm.
4. Pase el cable de altavoz a través del agujero.
5. Conecte los cables observando la polaridad. Mantenga los cables alejados de partes móviles o cortantes.
6. Monte el anillo de montaje sobre el medio/woofer.
7. Asegure el altavoz en la abertura con los tornillos. **Tenga la precaución de no doblar el marco del altavoz en este proceso.**
8. Presione la rejilla en el anillo de montaje.

# Veillez lire les instructions suivantes pour l'installation de ces produits.

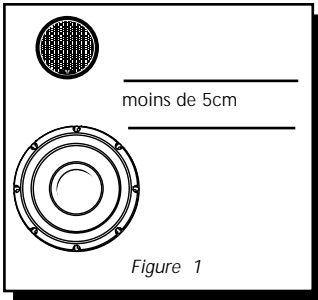
## INTRODUCTION

Ce manuel contient des informations sur les caractéristiques et l'installation de Fanatic X. Nous vous proposons de garder ce manuel pour toute référence future.

Nous vous recommandons vivement de faire installer votre punch Fanatic X par un dealer agréé Rockford Fosgate. Si vous choisissez d'installer le système vous même, assurez-vous de lire ce manuel entièrement avant de commencer.

## EMPLACEMENT DE MONTAGE

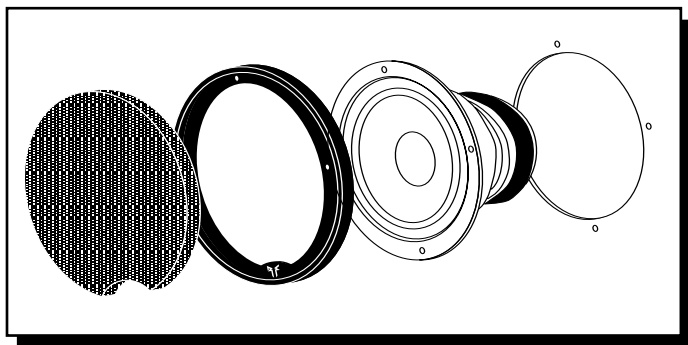
- Pour bénéficier d'une harmonie maximum entre le médium et l'aigu l'éloignement entre ces deux haut-parleurs devrait être de moins de 5 cm entre les 2 chassis. (Figure 1)





# INSTALLATION

## Montage du haut-parleur médium



FRANCAIS

1. Découper un trou adapté au haut-parleur médium/woofer.
  - Pour le FNX1404, le diamètre du trou est de 90,48mm
  - Pour le FNX1405, le diamètre du trou est de 113,50mm
  - Pour le FNX1406F, le diamètre du trou est de 127mm
  - Pour le FNX1406, le diamètre du trou est de 139,06mm
2. Placer l'anneau de montage sur le trou et repérer l'emplacement des trous des vis.
3. Retirer l'anneau. Percer les trous des vis en utilisant une mèche de 3mm.
4. Faire passer les fils dans le médium/woofer.
5. Connecter les fils au haut-parleur en respectant les polarités. Eloigner les fils de toute partie tranchante ou mobile du véhicule.
6. Placer l'anneau de montage au-dessus du trou central.
7. Placer le haut-parleur au-dessus du trou central. Visser le haut-parleur dans son emplacement. **Faire attention à ne pas tordre le châssis du haut-parleur durant cette étape de montage.**
8. Mettre la grille dans l'anneau de montage.

# Die folgende Bedienungsanleitung soll Ihnen beim Einbau eine Hilfestellung geben.

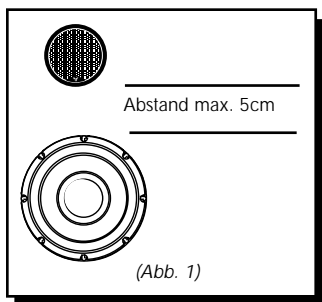
## ENLEITUNG

Diese Bedienungsanleitung enthält Informationen für den Gebrauch und Einbau des Punch Fanatic X. Wir empfehlen, diese auch für Fragen in der Zukunft sorgfältig aufzubewahren.

Es ist empfehlenswert, sich das Fanatic X von einem Autorisierten Rockford Fosgate Fachhändler einbauen zu lassen. Sollten Sie den Einbau jedoch selber vornehmen wollen, so empfehlen wir Ihnen, die Bedienungsanleitung sorgfältig zu lesen.

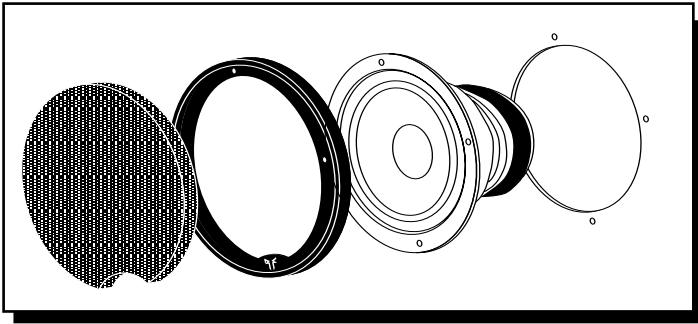
## EINBAUORT

- Für das optimale Zusammenspiel von Mittel- und Hochtöner, sollte der Hochtöner niemals weiter als 5cm vorn Mitteltöner entfernt montiert werden. (Abb. 1)





## Montage des Mitteltöners



1. Schneiden Sie die richtige Lochgröße für den Mitteltöner oder Midbass aus.
  - Für den FNX1404, schneiden Sie ein 90,48mm Ø Loch
  - Für den FNX1405, schneiden Sie ein 113,50mm Ø Loch
  - Für den FNX1406F, schneiden Sie ein 127mm Ø Loch
  - Für den FNX1406, schneiden Sie ein 139,06mm Ø Loch
2. Setzen Sie den Montagerring auf das Loch und markieren Sie die Löcher für die Schrauben.
3. Nehmen Sie den Ring wieder ab und bohren Sie dann, mit einem passenden Bohrer, die Schraubenlöcher vor.
4. Führen Sie das Kabel durch das Loch.
5. Schließen Sie die Lautsprecherkabel an. Kontrollieren Sie, ob die Polarität stimmt. Stellen Sie sicher, dass das Lautsprecherkabel an keinen scharfen oder sich bewegenden Teilen anliegt.
6. Plazieren Sie den Montagerring über dem Mitteltöner.
7. Plazieren Sie den Lautsprecher im Loch und befestigen Sie diesen. Seien Sie dabei sehr vorsichtig, so dass sich der Lautsprecherkorb nicht verzieht.
8. Drücken Sie das Lautsprechergitter im Montagerring fest.

# Leggere le istruzioni seguenti prima dell'installazione del prodotto.

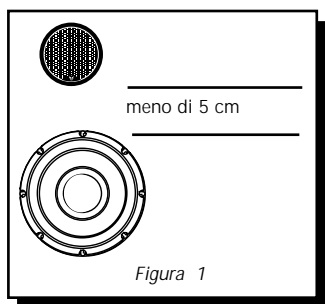
## INTRODUZIONE

Questo manuale fornisce informazioni sulle caratteristiche e sul installazione dei Fanatic X. Vi suggeriamo di conservare questo manuale come riferimento futuro.

Raccomandiamo fortemente che il sistema sia installato dal vostro rivenditore Rockford Fosgate. Se scegliete di procedere con l'installazione da soli, leggete attentamente tutto il manuale prima di proseguire.

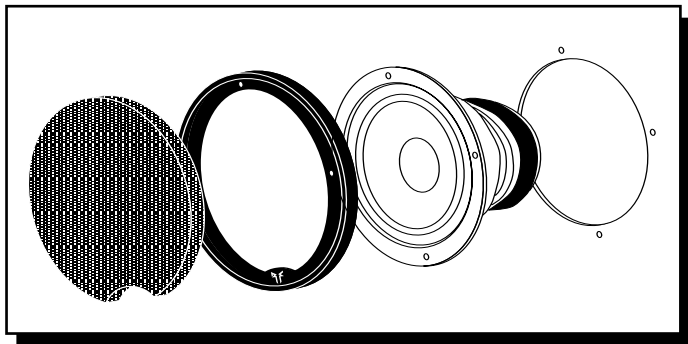
## POSIZIONAMENTO

- Per ottenere la miglior integrazione tra tweeter e midrange, vi suggeriamo di posizionare i due componenti a meno di 5 cm tra loro. (Figura 1)





## Installazione del Midrange



1. Praticate un foro del diametro corretto per il midrange/woofer
  - 90,48mm per FNX1404
  - 113,50mm per FNX1405
  - 127mm per FNX1406F
  - 139,06mm per FNX1406
2. Posizionate l'anello della griglia sul foro e segnate la posizione delle viti.
3. Togliete l'anello e forate il pannello con una puna da 3mm.
4. Passate i cavi attraverso il foro.
5. Collegate i cavi assicurandovi di osservare la corretta polarità. Assicuratevi di mantenere i cavi lontano da parti in movimento o strutture taglienti.
6. L'anello della griglia sopra il foro del midrange.
7. Posizionate l'altoparlante nel foro ed avvitatelo. **Assicuratevi di non piegare il cestello dell'altoparlante.**
8. Incastrate la griglia sull'anello di fissaggio.

# NOTES

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# NOTES

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Installation assistance available at:

**RFTECH**

[www.rockfordfosgate.com/rftech](http://www.rockfordfosgate.com/rftech)

**MADE IN THE USA**

This product is designed, developed and assembled in the USA by a dedicated group of American workers. The majority of the components used in the construction of this product are produced by American companies. However, due to the global nature of their manufacturing facilities and the loudspeaker parts industry in general, some parts may be manufactured in other countries.

**Rockford Fosgate**

Rockford Corporation  
546 South Rockford Drive  
Tempe, Arizona 85281 U.S.A.  
In U.S.A., (480) 967-3565  
In Europe, Fax (49) 8503-934014  
In Japan, Fax (81) 559-79-1265  
[www.rockfordfosgate.com](http://www.rockfordfosgate.com)