

RFR-1403

RFR-1404


RFR-1405

RFR-1406

# power

 **Rockford Fosgate**  
car audio for 

power midrange speakers  
operation & installation

 **The  
punch**®

Dear Customer,

*Congratulations on your purchase of the world's finest brand of car audio speakers. At Rockford Fosgate we are fanatics about musical reproduction at its best, and we are pleased you chose our product. Through years of engineering expertise, hand craftsmanship and critical testing procedures, we have created a wide range of products that reproduce music with all the clarity and richness you deserve.*

*For maximum performance we recommend you have your new Rockford Fosgate product installed by an Authorized Rockford Fosgate Dealer, as we provide specialized training through Rockford Technical Training Institute (RTTI). Please read your warranty and retain your receipt and original carton for possible future use.*

*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.*

*To get a free brochure on Rockford Fosgate products and Rockford accessories, in the U.S. call 602-967-3565 or FAX 602-967-8132. For all other countries, call +001-602-967-3565 or FAX +001-602-967-8132.*

## **PRACTICE SAFE SOUND™**

**CONTINUOUS EXPOSURE TO SOUND PRESSURE LEVELS OVER 100dB MAY CAUSE PERMANENT HEARING LOSS. HIGH POWERED AUTOSOUND SYSTEMS MAY PRODUCE SOUND PRESSURE LEVELS WELL OVER 130dB. 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 1-800-795-2385. 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 icon 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

# INTRODUCTION

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This manual provides information on the features and installation of the Punch Power Speakers. We suggest you save this manual for future reference.

We strongly recommend you have your Authorized Rockford Fosgate Dealer install the Punch Power Speakers. If you do choose to install the speakers yourself, please be sure to read the entire manual before beginning.

## PACKAGE CONTENTS

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Installation & Operation Manual	
(2) Midrange Speakers	
(2) Speaker Grilles	(1404/1405/1406)
(2) Speaker Grille Rings	(1404/1405/1406)
(2) Speaker Grille Gaskets	(1404/1405/1406)
(8) Phillips Mounting Screws	(1404/1405/1406)
(4) Phillips Mounting Screws	(1403)

## TECHNICAL DESIGN FEATURES

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### ◆ TPR Surround

TPR (Thermal Plastic Rubber) is resilient to temperature variations and provides a consistent support necessary of the linear motion of the speaker cone. In addition, the inherent damping capabilities eliminates the transmission of sonic disturbances between the cone and the frame of the speaker. This greatly improves the clarity of the speaker's midrange frequency response.

**THE RESULT:** Improves speaker's frequency response.

### ◆ Flat Spider

The speaker's linear compliance is balanced through the use of a "proprietary" flat spider design. A flat spider provides symmetrical control of the voice coil through its cone excursion. Linear cone excursion reduces harmonic distortion for improved sound quality.

**THE RESULT:** Reduces mechanical distortion for better sound quality

## ◆ High Temperature Voice Coil

The voice coil is of a high temperature copper wire construction. The wire is wound in two layers on a black, anodized, aluminum voice coil former. The voice coil former dissipates heat away from the voice coil improving the speaker's thermal stability and improving the reliability of the speaker.

**THE RESULT:** Improves reliability by dissipating generated heat.

## ◆ Vented Pole Piece

The vented pole piece by design, ensures proper ventilation to cool the voice coil and maintain lower operating temperatures. The vent on the rear of the magnet reduces back pressure and allows cool air to circulate in the voice coil gap. The air circulation increases the thermal power handling of the speaker.

**THE RESULT:** Improves power handling by cooling the voice coil.

## ◆ Silver Powder Coat Finish

Powder coating has long been the industry standard for durability in protective metal finishes. A dry powder (non-aerosol) is electrostatically applied to the metal and "baked" on to provide a hard "shell-like" finish. As an additional benefit, powder coating is the only finishing process that releases no toxic chemicals into our ozone.

**THE RESULT:** A durable and "earth friendly" metal finish.

# 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  
Tape Measure  
Voltmeter  
#2 Phillips Screwdriver

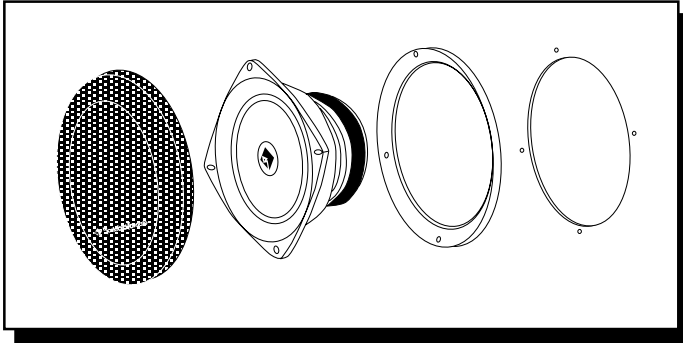
## *General*

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/crossovers 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/crossovers away from areas of extreme heat or moisture.
  6. Make sure there is an area large enough of the speaker to mount.  
**Warning! Failure to do this can cause damage to the speaker if the speaker frame is bent during installation.**
  7. 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.
  8. 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.
  9. 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).

# INSTALLATION



## Mounting the Midrange



1. Cut the proper size hole for the midrange/woofer.
  - For the RFR-1403, cut a  $2 \frac{31}{32}$ " (75.4mm) diameter hole
  - For the RFR-1404, cut a  $3 \frac{13}{16}$ " (96.8mm) diameter hole
  - For the RFR-1405, cut a  $4 \frac{7}{8}$ " (123.8mm) diameter hole
  - For the RFR-1406, cut a  $5 \frac{5}{8}$ " (142.9mm) 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. Place the mounting ring over the hole.
6. Attach the wires and be sure to observe the proper speaker polarity.
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.

# SPECIFICATIONS

Model	RFR-1403	RFR-1404	RFR-1405	RFR-1406
Nom. Imped.	4	4	4	4
FS (Hz)	150	85	70	65
RE (Ohm)	3.6	3.9	3.8	3.3
LE (mH)	0.15	0.16	0.3	0.43
QMS	1.99	1.43	1.52	1.57
QES	2.02	0.47	0.37	0.34
QTS	1	0.36	0.3	0.28
VAS (cu.ft)	0.035	0.145	0.198	0.445
VAS (liter)	1	4.1	5.6	12.6
Power (Watts RMS)	80	100	120	120
SPL (dB @ 1w/1m)	84.5	89	89	93
X-MAX (inches)	0.02	0.05	0.06	0.09
X-MAX (mm)	0.4	1.2	1.6	2.4
Mntg. Dia. (in.)	2-31/32	3-13/16	4-7/8	5-5/8
Mntg. Dia. (mm)	75.40	96.80	123.80	142.90
Mntg. Depth (in.)	1-3/8	2-5/32	2-21/32	2-31/32
Mntg. Depth (mm)	34.90	54.80	67.50	75.40

*(Specifications are subject to change without notice)*



# **LIMITED WARRANTY INFORMATION**

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

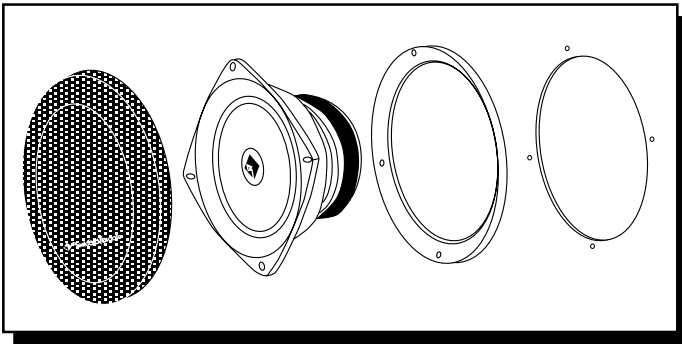
Este manual contiene información sobre la construcción, instalación y funcionamiento de los altavoces Punch Power. Le recomendamos que conserve el manual para futuras consultas.

Es preferible que la instalación de los altavoces Punch Power 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.

## INSTALACIÓN



### Montaje del altavoz de medios



1. Corte el agujero para el medio/woofer.
  - Par el RFR-1403, corte un círculo de 75,4mm de diámetro
  - Par el RFR-1404, corte un círculo de 96,8mm de diámetro
  - Par el RFR-1405, corte un círculo de 123,8mm de diámetro
  - Par el RFR-1406, corte un círculo de 142,9mm 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 perfore los agujeros con una broca de 1/8".
4. Pase el cable de altavoz a través del agujero.
5. Monte el anillo de montaje sobre el agujero.
6. Conecte los cables observando la polaridad. Mantenga los cables alejados de partes móviles o cortantes.
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 haut-parleurs Punch Power. Nous vous proposons de garder ce manuel pour toute référence future.

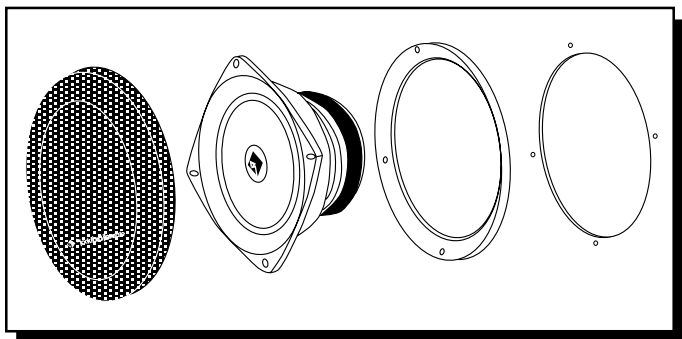
Nous vous recommandons vivement de faire installer votre système Punch Power par un dealer agréé Rockford Fosgate. Si vous choisissez d'installer le système vous même, assurez-vous de lire ce manuel entièrement avant de commencer.

## INSTALLATION



FRANÇAIS

### Montage du haut-parleur médium



1. Découper un trou adapté au haut-parleur médium/woofer.
  - Pour le RFR-1403, le diamètre du trou est de 75,4mm
  - Pour le RFR-1404, le diamètre du trou est de 96,8mm
  - Pour le RFR-1405, le diamètre du trou est de 123,8mm
  - Pour le RFR-1406, le diamètre du trou est de 142,9mm
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 trou central.
5. Placer l'anneau de montage au-dessus du trou central.
6. Connecter les fils au haut-parleur en respectant les polarités. Eloigner les fils de toute partie tranchante ou mobile du véhicule.
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.

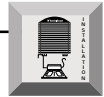
Die folgende Bedienungsanleitung soll Ihnen beim Einbau eine Hilfestellung geben.

## ENLEITUNG

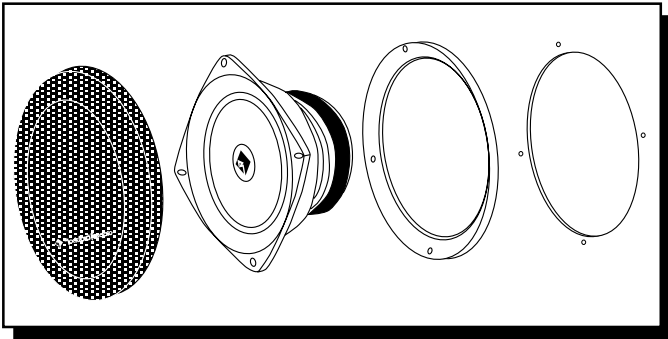
Diese Bedienungsanleitung enthält Informationen für den Gebrauch und Einbau des Punch Power **speakers**. Wir empfehlen, sie auch für Fragen in der Zukunft sorgfältig aufzubewahren.

Es ist empfehlenswert, sich das Punch Power **speaker** von einem autorisierten Rockford Fosgate Fachhändler einbauen zu lassen. Sollten Sie den Einbau jedoch selber vornehmen wollen, so empfehlen wir Ihnen diese Bedienungsanleitung sorgfältig zu lesen.

## EINBAU



### Mounting the Midrange



1. Schneiden Sie die richtige Lochgröße für den Mitteltöner oder Midbaß aus.
  - Für den RFR-1403, schneiden Sie ein 75,4cm Ø Loch
  - Für den RFR-1404, schneiden Sie ein 96,8cm Ø Loch
  - Für den RFR-1405, schneiden Sie ein 123,8cm Ø Loch
  - Für den RFR-1406, schneiden Sie ein 142,9cm Ø Loch
2. Setzen Sie den Montagering 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. Platzieren sie den Montagering über dem Loch.
6. 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.
7. Platzieren Sie den Lautsprecher im Loch und befestigen ihn. Seien Sie dabei vorsichtig daß sich der Lautsprecherkorb nicht verzieht.
8. Drücken Sie das Lautsprechergitter im Montagering fest.

Leggere le istruzioni seguenti prima dell'installazione del prodotto.

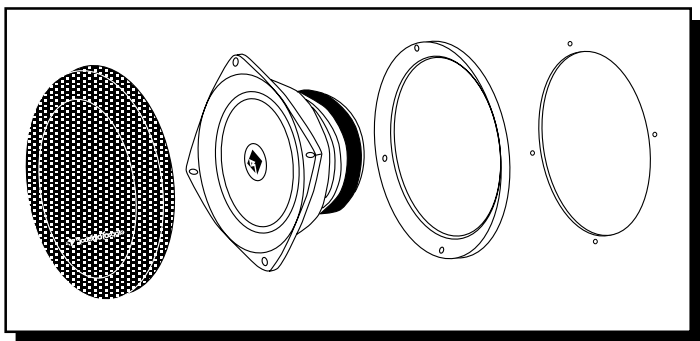
## INTRODUZIONE

Questo manuale fornisce informazioni sulle caratteristiche e sul l'installazione dei altoparlante Punch Power. Vi suggeriamo di conservare questo manuale come riferimento futuro.

Raccomandiamo fortemente che is 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.

## INSTALLAZIONE

### Installazione el Midrange



1. Praticate un foro del diametro corretto per il midrange/woofer
  - 75,4mm per RFR-1403
  - 96,8mm per RFR-1404
  - 123,8mm per RFR-1405
  - 142,9mm per RFR-1406
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 3,5mm.
4. Passate i cavi attraverso il foro.
5. L'anello della griglia sopra il foro dell'altoparlante.
6. Collegate i cavi assicurandovi di osservare la corretta polarità. Assicuratevi di mantenere i cavi lontano da parti in movimento o strutture taglienti.
7. Posizionate l'altoparlante nel foro ed avvitatelo. **Assicuratevi di non piegare il cestello dell'altoparlante.**
8. Incastrate la griglia sull'anello di fissaggio.



## 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**

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