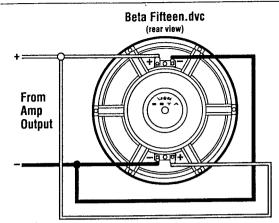
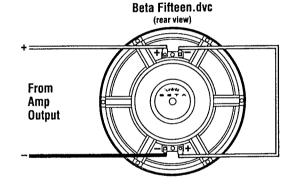
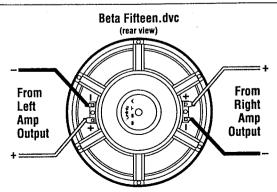
# BETA FIFTEEN.DVC 2-OHM (PARALLEL) WIRING



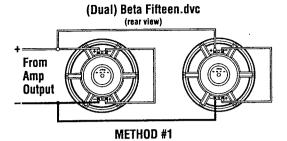
# BETA FIFTEEN.DVC 8-OHM (SERIES) WIRING

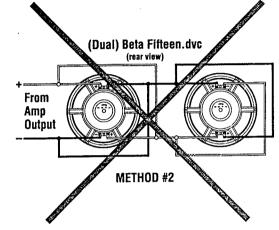


# BETA FIFTEEN, DVC SUMMED-MONO WIRING



# BETA FIFTEEN.DVC DUAL-SUBWOOFER WIRING





IMPORTANT: When connecting two Beta Fifteen.dvc subwoofers together, use Method #1 to create a net 4-ohm impedance. NEVER USE METHOD #2, since most amplifiers cannot fully control driver movement in this configuration.

# DECLARATION OF CONFORMITY

is in compliance with technical standards EN 50 081-1/1992 and EN 50 082-1/3.1995



Infinity Systems A/S Birkered, DENMARK, 4/96

Infinity Systems, Inc. • 20630 Nordhoff Street Chatsworth, CA 91311, USA • VOICE (818) 407-0228 • FAX (818) 709-9486

#### Printed In Japan

# ㅌ T ∧ Fifteen.dvc 15" Subwoofer

# INSTRUCTIONS

Thank you for purchasing an Infinity Beta fteen.dvc 15" Subwoofer. You've selected a premi-\_m product that offers superior performance and advanced materials, resulting from over 25 years of loudspeaker design. This Infinity product is made with our ongoing dedication to create the best consumer audio products possible. As a result, you can expect your new Beta Subwoofer to provide you with many years of listening enjoyment.

Refer to Subwoofer Enclosure Trade-Offs (on the inside pages) for help in selecting an enclosure type and alignment. Also, review the wiring diagrams (on the back page) on how to connect the subwoofer for 2-ohm, 8-ohm, and summed-mono applications.

Each Infinity Beta Fifteen.dvc 15" Dual Voice-Coil Subwoofer is covered by our limited parts and labor warranty (see the enclosed warranty card). Keep your original dated bill of sale in case warranty service is required.

IMPORTANT: Installation of automotive stereo components can require extensive experience in dealing with a variety of electrical, and mechanical procedures, including subwoofer box building. Although these instructions explain how to install a Beta Subwoofer in a general sense, they do not show the exact instal-Intion methods for your particular vehicle. If

do not have the experience, do not attempt tne installation yourself; instead ask your Authorized Infinity Car Audio Dealer about professional installation options.

#### **PRECAUTIONS**

- Always wear protective eyewear when using tools.
- Turn off all audio systems and other electrical devices before starting the installation.
- Disconnect the (-) negative lead from your vehicle's battery.

- Locate and note all fuel lines, hydraulic brake lines, and electrical wiring. Use extreme caution when cutting or drilling in and around these areas.
- · Check clearances on both sides of a planned mounting surface before drilling any holes or installing any screws.

#### THIELE-SMALL PARAMETERS

FREE-AIR RESONANCE:	F <sub>S</sub> (Hz)	22.00	
COMPLIANCE VOLUME:	$V_{AS}$ (F1 $^3$ ).	12.20	
	V <sub>AS</sub> (LITERS)	346.00	
Mechanical Q:	Q <sub>ms</sub>	9.90	
ELECTRICAL Q:	Q <sub>ES</sub>	0.24	
TOTAL Q:	$Q_{TS}$	0.23	
MAXIMUM EXCURSION:	X <sub>max</sub> (in)	0.39	
,	X <sub>MAX</sub> (MM)	10.00	
Voice Coil Dc Resistance:	R <sub>E</sub> (ohms)	3.40	

#### **SPECIFICATIONS**

DIAMETER:

15" (381.0 MM)

SENSITIVITY (2.83 V @ 1 M): 97 dB

POWER HANDLING:

350 W<sub>RMS</sub> PER VOICE COIL

FREQUENCY RESPONSE:

18 ~ 350 Hz

NOMINAL IMPEDANCE:

4 OHMS PER VOICE COIL

**DIMENSIONS:** mounting depth 6.60" (167.64 mm) cutout diameter 13.75" (349.25 mm) outer diameter -15.65" (397.51 mm)



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# **UBWOOFER ENCLOSURE TRADE-OFFS**

ubwoofer enclosures are classified as sealed (acoustic uspension) or ported (bass-reflex), and can be built in lany configurations. Here we discuss three popular ox types and encourage you to compare their response lives, noting the differences in Beta Fifteen.dvc outut level and frequency response versus volume in caled, vented, and single-reflex band-pass enclosures.

sealed enclosure is the smallest and simplest to build, ith high power handling, good phase coherence, and he most predictable response, at the expense of somehat diminished sound output. If amplifier power is not concern, this is the best choice for most systems, proding the highest output at the lowest frequencies.

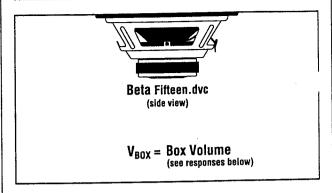
vented enclosure adds a port (or vent) tuned to the peaker's resonance in the box to help boost sound outnit by "tuning" the rear sound waves so they add to the ont ones. It is more efficient than a sealed box above tuned frequency, but more difficult to build properly. Or frequencies below the tuned range, output is lessed due to sound cancellation, and there is a 180-gree phase shift at the tuned frequency. Other drawacks are the increased box size for the added port and minished power handling due to woofer over-excuron at frequencies below the tuned frequency.

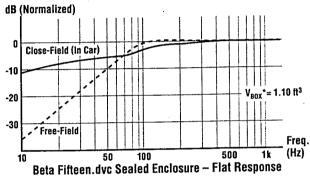
single-reflex band-pass enclosure counteracts the und cancellation properties in vented designs by isoting the subwoofer from the port within its own enclore. It offers higher power handling, and an automatic ind-pass response to help roll off higher frequencies. owever, it has a 180-degree phase shift at the tuned equency. Also, complexity and size are increased, due separate front and rear chambers, and it requires dding substantial midbass drivers elsewhere in the car.

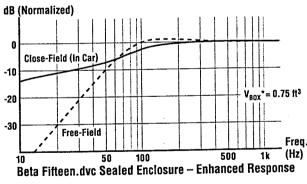
Je recommend a sealed enclosure for the Beta ifteen.dvc. Depending on your taste in music, you can elect a box volume for a flat, enhanced, or extended ass response (see graphs on right). The flat response is ptimum for all enclosures and types of music. The nhanced sealed box provides a "tighter" bass, great for ock and rap. An enhanced vented box has increased utput, but with diminished transient response and ower handling. The extended sealed box is more efficient at the lowest frequencies, providing added bass oost for jazz and classical music, but with diminished ower handling. The extended response curve provides he best power handling for vented enclosures.

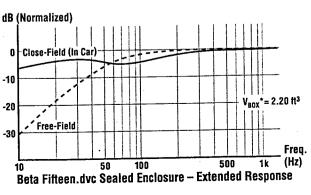
'or more help, please call Infinity technical support at:

## BETA FIFTEEN.DVC SEALED ENCLOSURE

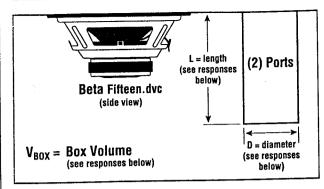


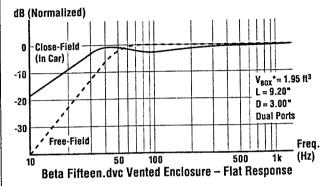


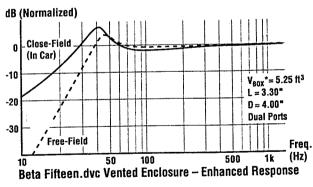


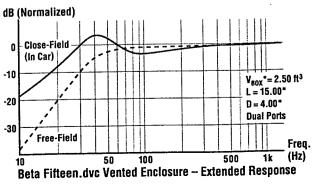


## BETA FIFTEEN.DVC VENTED ENCLOSURE



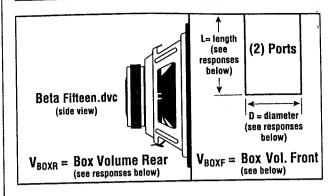


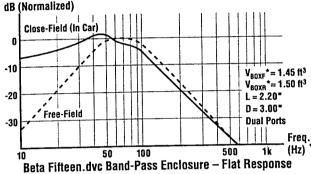


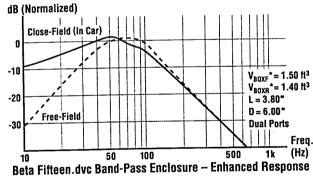


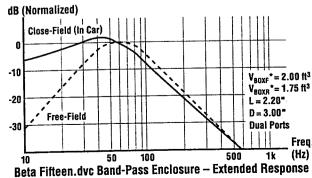
\*If filling is desired, reduce box volume by 20%.

#### BETA FIFTEEN.DVC BAND-PASS ENCLOSURE









\*If filling is desired, reduce box volume by 20%.