Limited Warranty

Definitive Technology warrants to the original retail purchaser only that this Definitive Technology Loudspeaker Product (the "product"), will be free from defects in materials and workmanship for a period of 5 Years (drivers and cabinet) and 3 Years (electronic components) from the date of the original purchase from a Definitive Technology Authorized Dealer. This warranty, however, will automatically terminate prior to the expiration of five (5) years (drivers and cabinet and three (3) years (electronic components) if the original retail purchaser sells or otherwise transfers the Product to any other party. The original retail purchaser shall hereinafter be referred to as "you." To obtain the warranty protection for your Definitive Technology Product(s), you must fill out the Warranty Registration card(s) within ten (10) days of purchase.

Defective Products must be shipped, together with proof of date of purchase, prepaid insured to the Authorized Dealer from whom you purchased the product, or at least to the nearest Factory Service Center. Products(s) must shipped in their original in the original packing container or its equivalent; in any case the risk of loss or damage in transit is to be borne by you. If, upon examination at the Factory or an Definitive Technology Authorized Dealer it is determined that the unit was defective in materials and workmanship at any time during this Warranty period, Definitive Technology or the Definitive Technology Authorized Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. All replaced parts and Product(s) become the property of Definitive Technology. Product(s) replaced or repaired under this warranty will be returned to you, within a reasonable time, freight collect.

This Warranty does not include use service or parts to repair damage caused by accident, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage in excess of the rated maximum of the unit, cosmetic appearance of cabinetry not directly attributable to defects in materials or workmanship, or service, or repair or modification of the Product which has not been authorized by Definitive Technology.

Definitive Technology makes no warranty with respect to its Products purchased from dealers or outlets other than Definitive Technology Authorized Dealers.

This Warranty is in lieu of all other expressed Warranties. If this Product is defective in material or workmanship as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will Definitive Technology be liable to you for any incidental or consequential damages arising out of the use or inability to use the Product, even if Definitive Technology or a Definitive Technology Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation may not apply to you.

All implied warranties on the Product are limited to the duration of this expressed Warranty. Some states do not allow limitation on how long implied warranty lasts, so the above limitations may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

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Definitive Technology Inc.

PowerField™ Subwoofers
ACTIVE CROSSOVER & POWER AMPLIFIER

PF 15

PF 1500

PF 1800

OWNER'S MANUAL

Table of Contents

Introduction

Congratulations on your purchase of a Definitive Technology PowerField™ Subwoofer. This revolutionary subwoofer utilizes state-of-the-art components, a non-resonant monocoque cabinet and low diffraction construction in order to achieve the most lifelike sound possible in your listening room for many years to come. The PowerField™ models are compact, high quality powered speaker systems intended primarily for use as subwoofers in superior quality music or home theater systems.

Powerfields™ powered subwoofers utilize integrated electronic crossovers and equalization that achieve the highest possible level of low frequency performance. The American-made amplifiers and electronic crossovers are completely self-contained modules which are housed in the subwoofer. The amplifiers are specifically engineered in conjunction with the drivers for optimum load matching and power transfer characteristics. The integrated electronic crossovers incorporate both high and low level inputs (and outputs), precise equalization, continuously variable low pass filter (between 50 and 100 cycles), variable high pass filter (50 or 100 cycles), continuously variable phase control
(PF 1500 and 1800), and a precision volume control . The high level inputs and outputs are gold plated 5-way binding posts with a built-in high pass filter The tremendous built-in flexibility allows easy, seamless integration with all main speaker systems and optimum performance in any room. The crossovers incorporate circuitry which allows for exceptional performance as either a single subwoofer (blending left and right bass channels) or when two subwoofers are used, one each for the left and right channels.

Our engineers have spent many years in developing these products. To ensure that you only experience the finest performance possible from your subwoofer, we encourage you to take a moment with this owner's manual and familiarize yourself with the proper installation and setup procedures for your PowerField™ Subwoofer.

If you have any further questions or comments, please feel free to contact our technical support staff at Definitive Technology Inc., 11105 Valley Heights Dr., Baltimore, MD 21117, or (410) 363-7148.

Subwoofer Placement

Your Definitive Technology subwoofer has been designed to operate at frequencies generally below 125 Hz. Because low-frequency information in this range essentially is non-directional, your subwoofer can be located anywhere in your listening room that is most convenient. Also, the continuously variable low pass filter operates at a very fast roll-off, ensuring great performance wherever you place your subwoofer. There are, however, some general rules that you should bear in mind when locating your subwoofer:

1. For maximum performance the subwoofer should be placed in a corner or against the wall, leaving roughly 1" clearance between the subwoofer and wall(s).

2. Corner placement will increase the subwoofer's efficiency, which in turn will increase your system's maximum output and improve the dynamic capability of the subwoofer.

3. While one Definitive Technology subwoofer will always sound great, the use of two subwoofers will definitely enhance your system's performance by providing a smoother and more consistent response pattern. Here, it is recommended that you locate the subwoofers on the same side of the room as the main speaker of the same channel.

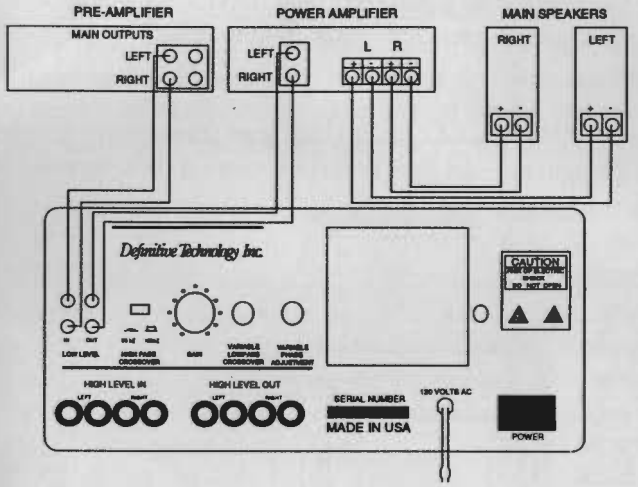
4. Always remember that frequency response and output level are greatly influenced by the subwoofer's placement. A movement of even a foot or two can dramatically change your system's response characteristics. You should experiment with placement in your particular listening room in order to achieve the highest performance from your subwoofer.

5. Your subwoofer contains a powerful amplifier inside its cabinetry. When placing the subwoofer into a built-in cabinet, please be sure it receives a clear flow of cooling air. If your subwoofer is to be located in a closed-back cabinet, be sure to put some ventilation holes in the cabinet back behind the subwoofer's back panel.

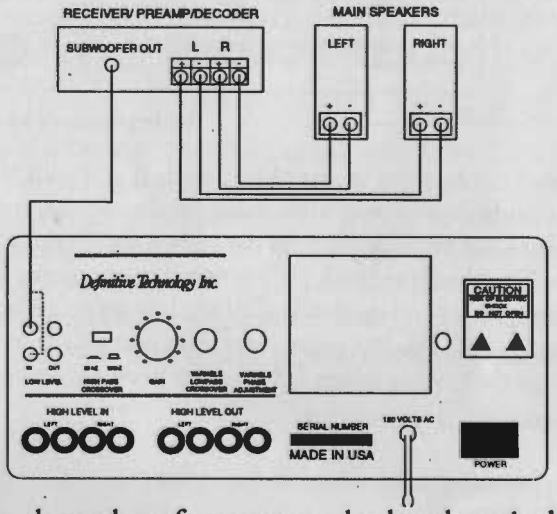
Wiring Diagrams

Low Level Connections

One way to hook up your Definitive Technology PowerField™ subwoofer is via the low level input connectors which are gold-plated RCA-type jacks designed to accept standard audio interconnect cables. For preamps and decoders, run an interconnect from the left and right outputs of the preamp or decoder to the left and right low level inputs on the subwoofer, then run another interconnect from the low level outputs on the subwoofer to the main left and right inputs on the amplifier or decoder. This same process can be used with the preamp out/main amp in



Note: Phase control is on PF1500 and 1800 only.



jacks found on most receivers.

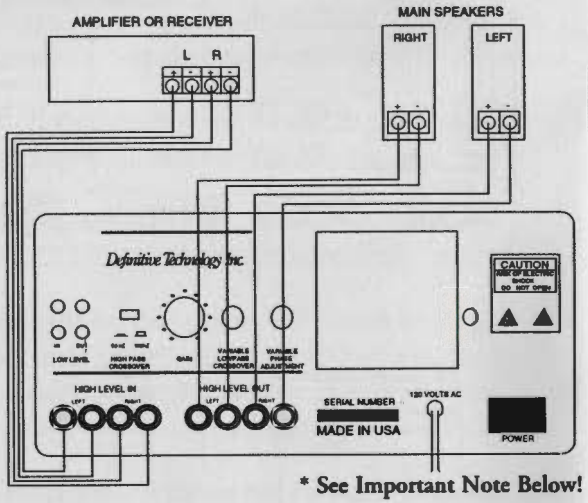
Alternately, many new model receivers, preamps and decoders feature a mono (line level) output intended to be used with subwoofers. By using the subwoofer outputs on your receiver, preamplifier or Dolby Pro Logic decoder, you are basically placing the subwoofer "in line" with the rest of your system. You can feed the mono subwoofer output to either the left or right low level input on the subwoofer and achieve full performance. Often these outputs have their own low pass filter built into the circuit. If you use these outputs, this low pass filter will work in conjunction with the low pass filter found in the PowerField™ subwoofer to create a very steep crossover slope. Also, these subwoofer outputs tend to have less gain than main line level outputs, thus the gain control on your subwoofer may need to be adjusted accordingly for proper balance. For a slight increase in gain, however, you can use a standard, RCA-type stereo Y-connector to split the mono output into separate left and right inputs on the subwoofer.

High Level Connections

Your Definitive Technology PowerField™ subwoofer can also be hooked up via high level connections. In this situation, you have the option of running your main

speakers "full-range" or by using the high pass filter built into the subwoofer. For high level wiring, your interconnects are simply equal distance lengths of high quality speaker cable.

To hook up your PowerField™ subwoofer via the high level connections, simply run speaker cable from the right channel high level connector on the subwoofer to the right channel speaker connector of your receiver or amplifier. Repeat this process for the left channel. Please take care that the red ("+") terminal on the subwoofer is connected to the red ("+") terminal on your receiver or amplifier, and that the black ("-") terminal on your receiver or amplifier is connected to the black ("-") terminal on the subwoofer. This will ensure absolute phase throughout your system.



*** See Important Note Below!**

Your main speakers can now be connected in one of two ways. If you wish to utilize the superior high pass filter built into your subwoofer, simply connect your main speakers to the high level out binding posts on the subwoofer. Again, take care to make red to red ("+") and black to black ("-") terminal connections. This connection will provide a smoothly contoured roll-off of the low frequencies going to your main speakers starting at 80 Hz. For more overall bass output when using full range main speakers, run the main speakers full range by hooking them up directly to the amp.

The Advantages of Dual Subwoofers

Definitive's Powerfield™ Subwoofers are engineered to be used singly or in stereo pairs. With a single subwoofer, both left and right signals are sent to the subwoofer wherein they are combined via the electronic crossover into one composite signal. With stereo subwoofers, the left and right low frequency signals are reproduced by their own individual subwoofers. The use of one subwoofer achieves outstanding performance, however, the addition of a second subwoofer (one for the left and one for the right channel) clearly offers the highest level of performance achievable for both movies and music. The use of stereo subwoofers smoothes out the peaks and dips which result from the eigenmodes in your room. Two subwoofers couple much better to the air in your room (four times better) and of course offer double the power. In addition, some state-of-the-art home theater installations have begun to use a separate subwoofer hooked up to the rear (surround) channels and we recommend this for the absolute ultimate in performance.

* NOTE: If you wish to run your main speakers full range with no low frequency roll-off, hook them directly to the main speaker output terminals or your receiver or amplifier as in any normal hi-fi system.

Dual Subwoofer Conections

When hooking up a stereo pair of subwoofers, wiring is quite similar to traditional high level connections. Here, instead of running both speaker cables from your receiver or amplifier to the left and right high level binding posts on the subwoofer, you will run the left channel to the left channel subwoofer and the right channel to the right channel subwoofer. Again, take care to make red to red ("+") and black to black ("-") terminal connections.

Don't worry that on your left subwoofer the right channel binding posts will be empty and that on the right channel subwoofer the left channel binding posts will be empty – both channels are combined at the subwoofer's input stage. There is a possibility that with this type of wiring you may need to increase your gain a little bit for proper balance.

A dual subwoofer system using low level connections is equally simple. From your receiver or preamp run an RCA-type interconnect from the left channel main output to the left channel low level input on the subwoofer you are using for the left channel. Then run another interconnect from the subwoofer's left channel low level output to the left channel main input on your receiver. The process should then be repeated for the right channel. In this setup, main speaker connections are made between your receiver or amplifier in a traditional manner.

Operating Controls

Your Definitive Technology PowerField™ Subwoofer is equipped with a full complement of operating controls to ensure complete flexibility and maximum performance in any installation. Most of them basically are the "set and forget" type, although occasionally certain controls will require minor adjustment.

Power Switch: On the bottom right corner of your subwoofer's back panel is the power switch that turns the unit on and off. Be sure the subwoofer is switched off when wiring your system, or if it is not to be used for an extended period.
Gain Control: On the back panel of your subwoofer is a gain (volume) control. This control is used to raise or lower the output level of your subwoofer in relation to the other speakers in your system.

Low Pass Filter: Your subwoofer's back panel features a continuously variable low pass filter. This filter is continuously variable between 50 and 100 Hz and operates with a slope of 36 dB per octave (PF 1500 and 1800) or 24dB per octave (PF 15). This control is used to obtain the optimum balance between the subwoofer and your main speakers. In general, this control should be set at or near the high pass frequency being used by your main left and right speakers (refer to your owner's manual). Many people, however, opt for a slightly overlapping setting in order to achieve higher output. In any instance, experimentation is recommended due to system and placement variables.

High Pass Filter: Your subwoofer is equipped with a selectable (50 or 100 Hz) high pass filter. If you are using a pair of full range main speakers we recommend setting the filter for 50 Hz. If you use a pair of satellite speakers for your main channels, we recommend the 100 Hz setting. This control only works using the low level inputs.

Phase Control: (PF 1500 and 1800 only):On the back of your subwoofer you will find a continuously variable phase control, with a range of 0 - 180 degrees. This control is used to perfectly blend the output of your subwoofer with your main speakers, and to compensate for any possible problems due to placement constraints.. The control should be set to "0" when setting up your subwoofer. Again, experimentation with this control is recommended due to system and placement variables.

Troubleshooting

If you experience any difficulties with your subwoofer, try the suggestions described below. If you are still having problems, please consult your Definitive Technology authorized dealer for assistance.

1. Make sure all your system interconnects and power cords are solidly in their place.
2. Should you experience any level of ground hum or noise, try plugging the subwoofer into the same circuit as your amplifier, or using a non-grounding plug adapter.
3. The system is provided with sophisticated internal protection circuitry. If for some reason the protection circuitry is tripped, please turn down your system's volume and wait five minutes before trying the system again. If the amplifier should overheat, the system will turn itself off until the amplifier cools down and resets.
4. Check to be sure that your power cord has not been damaged.
5. Check that no foreign objects or liquid has entered the cabinet.
6. If you cannot get your subwoofer to turn on or if no sound comes out and your sure the system is set up properly, please bring the subwoofer to your Definitive Technology Authorized Dealer for assistance.

Specifications

Powerfield ™ 15

Dimensions:	17 1/2"H x 17"W x 17"D
Frequency Response:	18- 125 Hz
Driver Complement:	One 15" woofer with polymer laminated cone
Amplifier:	185 watts RMS
High Pass Filter:	12 dB/octave selectable (50 or 100 cycles)
Low Pass Filter:	24 dB/octave continuously variable (50 - 100 cycles)

Powerfield ™ 1500

Dimensions:	20"H x 18"W x 18"D
Frequency Response:	15- 125 Hz
Driver Complement:	One 15" cast basket woofer with polymer laminated cone
Amplifier:	250 watts RMS
High Pass Filter:	12 dB/octave selectable (50 or 100 cycles)
Low Pass Filter:	36 dB/octave continuously variable (50 - 100 cycles)

Powerfield ™ 1800

Dimensions:	22"H x 20"W x 20"D
Frequency Response:	15- 125 Hz
Driver Complement:	One 15" cast basket woofer with polymer laminated cone
Amplifier:	500 watts RMS
High Pass Filter:	12 dB/octave selectable (50 or 100 cycles)
Low Pass Filter:	36 dB/octave continuously variable (50 - 100 cycles)