

C/L/R 2300

LCR Center/Left/Right Audio Video Shielded Loudspeaker with Built-In Powered Subwoofer

Owner's Manual

Congratulations on your purchase of the Definitive Technology C/L/R 2300 Shielded LCR Center/Left/Right Audio Video Loudspeaker System. This revolutionary loudspeaker utilizes state-of-theart components (cast-basket homopolymer-coned bass-midrange drivers, moving coil ferrofluid-cooled dome high frequency radiator, long excursion subwoofer, infinite power source amplifier, uniphase crossover networks, etc.), 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 Definitive Technology C/L/R 2300 is a compact high definition loudspeaker system designed for use in audio/video systems of the highest quality. Because of its low profile, wide range, high power handling and articulate clarity, it is ideal for use as a center channel in conjunction with all surround sound decoding systems, including Dolby Pro Logic*, Dolby Digital AC-3*, and DTS*. In addition, the C/L/R 2300 is ideal for use as an LCR (left, center right speaker) as well as a rear surround speaker in all surround sound decoding systems, including Dolby Pro Logic*, no Logic*, Dolby Digital AC-3*, and DTS*. In addition, the surround sound decoding systems, including Dolby Pro Logic*, Dolby Digital AC-3*, and DTS*, or as audiophile quality main speakers in a high quality stereo system.

* Registered Trademark

Safety Precautions



CAUTION! To reduce the risk of electric shock and fire, do not remove the cover or back plate of this device. There are no user serviceable parts inside. Please refer all servicing to licensed service technicians. Avis: Risque de choc electricque, ne pas ouvrir.

CAUTION! The international symbol of a lightning bolt inside a triangle is intended to alert the user to uninsulated "dangerous voltage" within the device's enclosure. The international symbol of an exclamation point inside a triangle is intended to alert the user to the presence of important operating, maintenance and servicing information in the manual accompanying the device. CAUTION! To prevent electrical shock, match wide blade of plug to wide slot, fully insert.

Attention: Pour eviter les chocs electriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

CAUTION! To reduce the risk of electrical shock, do not expose this equipment to rain or moisture.

- 1. Read Instructions—All safety and operating instructions should be read before operating the device.
- 2. Retain Instructions—The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings-All warnings on the device and in the operating instructions should be adhered to.
- 4. Follow Instructions—All operating and safety instructions should be followed.
- 5. Water & Moisture-The device should never be used in, on or near water for risk of fatal shock.
- 6. Carts & Stands-The device should only be used on carts or stands recommended by the manufacturer.
- 7. Wall & Ceiling Mounting—The device should be mounted on a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation—The device should always be located in such a way that it maintains proper ventilation. It should never be placed in a built-in installation or anywhere that may impede the flow of air through its heat sink.
- 9. Heat—Never locate the device near heat sources such as radiators, floor registers, stoves or other heat-generating devices.
- 10. Power Supply—The device should only be connected to a power supply of the type described in the operating instructions or as marked on the device.
- 11. Power Cord Protection—Power cables should be routed so they are not likely to be stepped on or crushed by items placed on them or against them. Special attention should be paid to areas where the plug enters a socket or fused strip and where the cord exits the device.
- 12. Cleaning-The device should be cleaned in accordance with manufacturer's instructions.
- 13. Periods Of Non-Use—The device should be unplugged when not being used for extended periods.
- 14. Dangerous Entry—Care should be taken that no foreign objects or liquids fall or are spilled inside the device.
- 15. Damage Requiring Service—The device should be serviced by licensed technicians when:
 - The plug or power supply cord has been damaged.
 - Objects have fallen or liquid spilled inside of the device.
 - The device has been exposed to moisture.
 - The device does not appear to be operating properly or exhibits a marked change in performance.
 - The device has been dropped or the cabinet becomes damaged.
- 16. Service—The device should always be serviced by licensed technicians. Only replacement parts specified by the manufacturer should be used. The use of unauthorized substitutions may result in fire, shock, or other hazards.

Unpacking Your C/L/R 2300

Please Inspect For Shipping Damage

Each loudspeaker leaves our plant in perfect condition. Any visible or concealed damage most likely occurred in handling after it left our plant and should be reported at once to your Definitive dealer or the delivery company that delivered your loudspeaker. Please unpack your system carefully. Save all cartons and packing materials in case you move or need to ship your system. Record the serial number found on the back of the C/L/R 2300 in the appropriate place on your warranty card.

Speaker Break-in

Your C/L/R 2300s should sound good right out of the box; however, an extended break-in period of 40-60 hours or more of normal playing is required to reach full performance capability. Break-in allows the suspensions to work in and results in fuller bass, a more open "blossoming" midrange and smoother high frequency reproduction.

Installing the Logo

Because the C/L/R 2300 can be used either vertically or horizontally, the logo is supplied separately. Holes are provided for installation when the speaker is used horizontally or vertically. These are located under the grill cloth in recesses that you can feel through the grill cloth at the center of the lower long edge of the speaker and at the top and bottom short edge of the speaker grill cloth on the front (so you can orient the speakers with each speaker's woofer facing in or each speaker's woofer facing out if you position the speakers vertically). Locate the logo over the two holes within each recess that you choose and gently tap it in through the grill cloth.

Installing the Feet/Angling Device

The C/L/R 2300 is supplied with brass inserts designed to go into the bottom of the speaker, when the speaker is positioned horizontally, to hold adjustable feet which hold the speaker above the surface it is placed on as well as give you the option of angling the speaker up or down to point directly at the listeners. Install three of these inserts in the bottom of the speakers. There are predrilled holes on the bottom of the speaker under the grill cloth (when the speaker is positioned horizontally). Simply locate the holes. Two holes are located a little back (both the same distance) from the front of the speaker. Install brass inserts in each of these. You also have a choice for the rear hole depending on the depth of the surface you will place the speaker on. They are located along the center line going from the front and the back of the speaker on the bottom. Then feel for them and select one of these holes. Gently tap the inserts in through the grill cloth and screw the feet in. Please note that the C/L/R 2300 is designed to achieve optimum performance whether it is mounted on a stand, on a TV, in a cabinet or on a shelf and may be positioned horizontally or vertically.

For Center Channel Use

The C/L/R 2300, when used singly for center channel use, can be placed horizontally or vertically above or below the TV. When used as center channel pairs, the C/L/R 2300s should be placed on either side of the TV, or above and below it.

For Main Left, Right LCR and Rear Surround Use

The C/L/R 2300 is a high quality, full-range speaker system which, in addition to its use as a center channel in home theater systems, can also be used as a left and right main speaker (LCR) in all home theater systems as well as conventional two channel audio systems. When the C/L/R 2300 is used as a left and right main speaker, it may be positioned either vertically or horizontally. When the C/L/R 2300 is used as a rear surround speaker, it may also be positioned vertically or horizontally. Please note that when positioning the C/L/R 2300 vertically the woofers may both face either in or out or both may face to the left or both may face to the right. Normally, you would have them both face in or both face out and which is better for your system can only be determined by experimentation.

Woofer Clearance

Your C/L/R 2300 has a woofer located on one of the large flat surfaces. Position the speaker so that the woofer does not press directly flat up against another hard surface -2 or 3 inches of clearance is sufficient.

Connecting Your Loudspeakers

Your C/L/R 2300 is a unique LCR speaker system which may be used as a stereo pair (left and right), a center channel, a left, center and right and as a rear or side surround loudspeaker.

Connecting Each Speaker with Speaker Wires Only

In most cases, you will connect the C/L/R 2300(s) to your amplifier as youwould with any other speaker. When the C/L/R 2300(s) is hooked up using simply one set of speaker wire per speaker (with no separate low level input for the subwoofer section) a special circuit within the speaker takes an infinitesimally small signal from the speaker level input and converts it to a low level signal which then drives the subwoofer power amp in the speaker. Simply connect the red (+) terminal of the speaker to the red (+) terminal of the appropriate channel of your amplifier or receiver and then connect the black (-) terminal of the speaker to the black (-) terminal of the same channel of your amplifier or receiver. Remember, it is essential that all the speakers (center, left, right and rears) be connected in the same way (in phase) to its own channel of the amplifier. If you experience a great lack of bass,it is likely that one speaker or more is out of phase the the others.

Using the Low Level RCA Input

You will note that your C/L/R 2300(s) has a low level RCA input jack on the back. In most cases you will not use this input.

The particular set-up where you can use this input (although it is absolutely not necessary to use it) is when you are using 3 C/L/R 2300s across the front as Left, Center and Right channel loudspeakers without a separate subwoofer on the LFE channel. In this case you can use a Y type low level RCA connector that goes from one to three wires and hook the one wire to the LFE RCA low level out on your decoder or receiver and the three wires one each to the low level RCA input on the back of your three C/L/R 2300s. You will then set the bass management system to "Large" left main "Large" center and "Large" right main and "Yes" subwoofer. Using this type of hookup will enable you to balance the bass level on the speakers for music (with the level control on the back of the speakers) while allowing you to adjust the LFE level separated for extra LFE impact on movies. In addition it will utilize the subwoofer capability of all three C/L/R 2300s for the LFE channel.

Using your C/L/R 2300 as a Center Channel

When using your C/L/R 2300 as a center channel in a Dolby Digital system, simply hook-up the C/L/R 2300 to the center channel amplifier output of your system as described in the preceding section. In most cases you will set the center channel bass management on your decoder to "Large" center channel, however you can experiment with this to determine if "Large" or "Small" sounds best in your particular system.

Using your C/L/R 2300s as Left and Right Main Speakers in a Dolby Digital System

If you are using a pair of C/L/R 2300s also as the main left and right speakers, hook them up to the left and right channel amplifier outputs as described in the preceding section. If you are not using an additional sub-woofer for the LFE channel, set the bass management system of your decoder to "Large" left and right main speakers and "No" subwoofer. This will send the LFE signal into the left and right main speakers where it will be amplified by the C/L/R 2300s built-in amplifier and reproduced by the built-in subwoofers.

If you are using an additional subwoofer for the LFE channel, set the bass management system on your decoder to "Large" left and right main and "Yes" subwoofer. However please note that it is possible in this set-up that, depending on your room and desired listening levels that it may sound better with left and right main set to "Small" so you can experiment with this to determine what sounds best to you.

VERY IMPORTANT: SETTING CHANNEL BALANCE AND BASS MANAGEMENT SYSTEMS

Dolby Digital and ProLogic systems and decoders have a critical channel balancing procedure for the left and right front speakers, center channel, rears and subwoofer (if it is hooked up through the LFE or Sub Out low level connection) which must be followed if the system is to perform properly. We have spoken with many system users with problems relating to the overall sound of their system which could be clearly traced back to improper system balance.

Also note that Dolby Digital decoders have bass management systems (systems which direct the bass to the various channels) which vary from unit to unit. This bass management system must also be properly adjusted. If you are using large rear surround speakers with very extended low frequency response—such as another pair of C/L/R 2300s—set the rear channels of your decoder's bass management system to "Large." If not, set them to "Small." Center channel should be set on "Large." If you are using C/L/R 2300 as left and right main speakers without an additional subwoofer, left and right front channels should be set on "Large" and the bass management system set for "No" subwoofer. If you have an additional separate subwoofer set bass management system to "Yes" subwoofer.

Using your C/L/R 2300s as Rear Surrounds

C/L/R 2300s can be used as exceptional quality rear surround speakers. If you use them as rear surrounds, simply hook them up normally to the rear surround amplifier outputs and set your bass management system to "Large" left and right surrounds.

Using your C/L/R 2300s in a Stereo System

If you are using a pair of C/L/R 2300s also as the main left and right speakers in a stereo system, hook them up to the left and right channel amplifier outputs as described in the preceding section. If you are using a Dolby Digital receiver set the base management system to "Large" left & right main front speakers and "No" sub.

Setting Bass and Treble Controls on Your Receiver or Amplifier

Normally we recommend that you set the Bass and Treble controls on flat or 0 dB. This will give you the most linear and natural sound. If you want more bass, raise the subwoofer level control on your C/L/R 2300, keeping in mind that even a little turn of the knob can make a big difference in the sound. Also, if your amplifier or receiver has a graphic equalizer, we recommend that you leave it flat. The reason for this is that we have spoken with many consumers about what they thought were improperly sounding speakers when in fact the problem was misadjusted tone controls. When in doubt, leave them flat; this almost always sounds the best.

Powering Up the Active Subwoofer Section

Your C/L/R 2300(s) contains a built-in, active powered subwoofer section as well as an electronic crossover and so each C/L/R 2300 must be plugged into an electrical socket (unswitched if possible) of the appropriate voltage (as indicated on the back of your unit) using the plug on the end of the black cord attached to the electronics module on the back of the loudspeaker. The C/L/R 2300 has a special circuit which automatically turns the powered subwoofer section on when a signal is fed to the loudspeaker and does not require an on-off switch. The red LED on the back panel will light up when a signal is sensed and the amplifier turns on. If you hear a "pop" when the amp powers up, this is normal. Please note that after the cessation of a signal, it may take up to an hour for the amplifier to actually turn off.

Setting Your C/L/R 2300's Low Frequency Level Control

Your C/L/R 2300 has a level control for the electronic crossover which allows you to perfectly tune the output level of the powered low frequency subwoofer section to match your room as well as to fulfill your own personal listening preferences. Please note that there are no controls to vary the crossover points or phase because these have been factory set to provide perfect blending (a major performance benefit of this innovative product.) We suggest beginning with the level control set at approximately 2 o'clock. Set the level control so that the sound is most pleasing to you. In general, when used as a center channel, the C/L/R 2300 subwoofer should not be turned up excessively high to add more "room shaking level bass" but should be kept in proper balance with the upper bass/midrange drivers in order to achieve properly balanced high-impact full-range center channel presentation. When used as main LCR speakers in conjunction with an additional subwoofer in general we would recommend keeping the level control around the 2 o'clock position on your C/L/R 2300s and raising the level on your additional external subwoofer if you want more "room shaking bass".

If you use the C/L/R 2300 as left and right main front speakers, normally the level control of the left speaker will be set the same as the level control of the right speaker. However, these controls can also be set differently on the two speakers in order to allow you to vary the response of left and right speakers separately to compensate for variations and asymmetrical positioning of the left and right speakers in your room (i.e., when one is closer to a side wall or corner, etc.) if this is how you must set them up. This is a very unique and useful feature which allows you much greater flexibility in loudspeaker placement, as well as the ability to optimize what could otherwise be difficult placement situations.

Usually if distortion is heard when the speakers are being driven at loud levels, it is caused by driving (turning up) the amplifier too loud and not driving the speakers with more power than they can handle. Remember, most amplifiers put out their full rated power well before the volume control is turned all the way up! If your speakers distort when you play them loud, turn down the amplifier or get a bigger one.

The Complete C/L/R 2300 Home Theater System

The complete C/L/R 2300 home theater system combines three C/L/R 2300s (with or without an additional subwoofer for the LFE channel) and a pair of perfectly matched Definitive rear surround speakers (which can be another pair of C/L/R 2300s). This superb system offers the ultimate in home theater performance with all decoding technologies including Dolby Digital AC-3 and DTS. Remember, to achieve proper blending and full performance it is essential to use Definitive speakers to complete your home theater system.

Technical Assistance

It is our pleasure to offer assistance if you have any questions regarding your C/L/R 2300s or their set-up. Please contact your nearest Definitive Technology dealer or contact us directly at 410-363-7148 or www.definitivetech.com

Service

Service and warranty work on your Definitive loudspeakers will normally be performed by the local Definitive Technology dealer from whom you have purchased your loudspeakers. If, however, you wish to return the speaker to us, please contact us first, describing the problem and requesting authorization as well as the locations of the nearest factory service center. **Please note that the address given in this booklet is the address of our offices only. Under no circumstances should loudspeakers be shipped to our offices or returned without contacting us first and obtaining return authorization.**

> Definitive Technology Offices 11433 Cronridge Dr. Owings Mills, Maryland 21117 Phone: 410-363-7148

Visit us at www.definitivetech.com

C/L/R 2300 Specifications

Dimensions Frequency Response Nominal Impedance	5 ³ / ₄ " x 19 ¹ / ₂ " x 12"D 22 Hz – 30 kHz Compatible with 4 – 8 ohms outputs (set amp on 4 ohms if you have a choice)
Driver Complement	Two 4 ¹ / ₂ " cast-magnesium basket bass/midrange drivers, and a 1" pure aluminum dome in D'Appolito Array. Plus a long-throw 8" powered subwoofer. Shielded.
Recommended Associated Amplification Built-in Subwoofer Power Amplifier	20 – 250 watts/channel 150 watts

Limited Warranty: 5-Years for Drivers and Cabinets, 3-Years for Electronic Components

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 five (5) years covering the drivers and cabinets, and three (3) years for the electronic components from the date of the original purchase from a Definitive Technology Authorized Dealer. However, this warranty will automatically terminate prior to the expiration of five (5) years for the drivers and cabinets and three (3) years for the 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." 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 to the nearest factory service center. Product(s) must be shipped in the original shipping 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 a Definitive Technology Authorized Dealer, the Unit was defective in materials or 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 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 an implied Warranty lasts, so the above limitations may not apply to you. This Warranty gives you specific legal rights, and you also may have other rights which vary from state to state.

CE

This product complies with the essential requirements of EMC directives 89/336/EEC and 73/23/EEC (inclusive of 93/68/EEC) and carries the CE mark accordingly.