DCM
LOUDSPEAKERS

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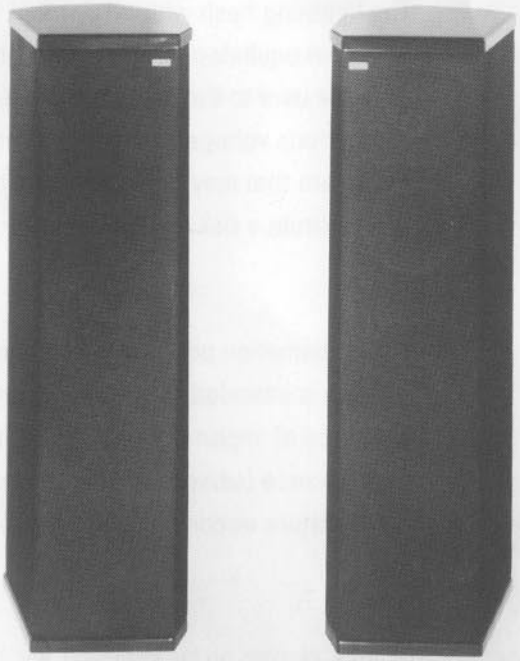
Before you plug in...



POWERED TIME WINDOW SURROUNDSCAPE AUDIO & HOME THEATER LOUDSPEAKERS

SETUP & OPERATING INSTRUCTIONS

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE AMPLIFIER BACK

NO USER SERVICEABLE PARTS INSIDE

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADE CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

INTRODUCTION

Thank you for choosing Powered Time Window Surroundscape™ speakers for your audio/video system. The advanced psychoacoustic technology incorporated in these speakers not only delivers great sound in a variety of applications, it also results in a great-looking speaker that fits a variety of home decor styles.

Your DCM Powered Time Window Surroundscape speaker system:

- Includes two "mirror-imaged" Powered Time Window Surroundscape speakers
- Is ideal for applications with or without additional surround speakers
- Expands the perceived size of any listening/media room
- Enhances the excitement, scope and total impact of movies
- Adds greater depth and "live presence" to musical recordings
- Is compatible with current standards such as Dolby Pro Logic and Dolby Digital, and is ready for future digital sound processing technologies
- Has a contemporary/classic design that complements or accents a wide range of interior decor styles.

These speakers have been designed to deliver superior three-dimensional sound reproduction in stereo mode *and* deliver surround sound with or without surround speakers. DCM's innovative Shadow Driver Management System™ lets you send both main and surround channel signals into the Powered Time Window Surroundscape speakers, as well as bass information from the main channels, so you can enjoy the ultimate in stereo/ambient music and home theater surround sound.

By reproducing both main/front and surround channel information with a left and right speaker, the Powered Time Window Surroundscape speaker system can effectively increase the ambience of stereo recordings and maximize the potential of *Hall, Matrix* and other pre-set effects. By adding the *Surround* effect, most recordings will sound more spacious.

To ensure that these speakers perform at their best and that you are totally satisfied with their performance, please read these instructions carefully before setting up your Powered Time Window Surroundscape speakers.

If you have any questions or need more information, please contact your DCM retailer. Or call DCM Loudspeakers toll-free 1-800-878-TIME between 9 AM and 5 PM (Eastern Time Zone), Monday through Friday.

UNPACKING YOUR SPEAKERS

As you unpack your speakers, please note that the gloss-black tops are attached to the speaker body with plastic fittings. These fittings hold the top in place, but will not hold if you try to lift the entire speaker by the top. The correct way to protect the speakers and your back is to lift the entire speaker cabinet from the bottom or to have two people maneuver the speaker into position. It may be easier to unpack the speakers by opening the cartons from the bottom, raising the speakers upright and then lifting the cartons over the speakers. After unpacking your speakers, please remove the protective plastic wrapping from the tops.

△ CAUTION!

DO NOT LIFT THE POWERED TIME WINDOW SURROUNDSCAPE SPEAKER BY GRABBING THE GLOSS BLACK TOP. THIS COULD DAMAGE THE TOP.

Your Powered Time Window Surroundscape speakers work together as a "mirror-imaged" pair. It is not necessary to have speakers with consecutive serial numbers. But is IS essential that you have a LEFT and RIGHT Powered Time Window speaker. Inspect the back of each speaker, near the input connectors, to make sure you have one LEFT and RIGHT speaker. After carefully unpacking your speakers, save the cartons and the packing materials. They will come in handy should you need to return the speakers or move to a new home. The boxes flatten easily and can be reused if necessary.

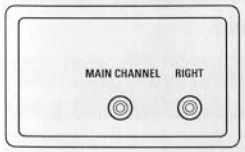
If a speaker appears to be damaged, please do not attempt to connect it. Repack it in its original carton and notify your DCM retailer.

CONNECTING YOUR SPEAKERS

Please follow these steps to connect the speakers to your amplifier or receiver:

- Turn off your amplifier or receiver and unplug it from the power outlet.
- Use 16-gauge or larger speaker wire for best results. Strip away approximately 1/2-inch of insulation from each wire conductor. Because the speakers have five-way binding posts, you may attach the wires to banana plugs and plug them in, or attach the wires directly to the speaker input terminals.
- Each Powered Time Window Surroundscape speaker has both MAIN CHANNEL and SURROUND CHANNEL input terminals to accept signals from your amplifier or receiver's MAIN and SURROUND CHANNEL output jacks. The MAIN CHANNEL speaker terminals are above the REAR CHANNEL terminals on the back of each speaker. *(See Figure A)*

(Figure A)



Each Powered Time Window Surroundscape speaker has MAIN CHANNEL and REAR CHANNEL terminals. Connect your receiver's MAIN output to the MAIN CHANNEL speaker terminal and the REAR CHANNEL/SURROUND output to the REAR CHANNEL terminal.

- Make sure you connect the speaker wires from the MAIN output of the amplifier or receiver to the MAIN CHANNEL terminal of the speaker, and the speaker wires from the SURROUND CHANNEL output of the amplifier or receiver to the SURROUND CHANNEL terminal of the speaker.

For both MAIN and SURROUND CHANNEL connections follow these instructions:

- Connect one wire from the negative (black) terminal of the left speaker to the negative (-) terminal on the left speaker output channel of your amplifier or receiver. (NOTE: Most speaker wire is color coded or ribbed on one side for easy identification of the positive and negative leads.)
- Connect the other wire from the positive (red) terminal of the left speaker to the positive (+) output terminal of the left channel of your amplifier or receiver. Repeat these steps when hooking up your right channel speaker with the right channel of your amplifier or receiver.
- Because a subwoofer power amplifier is built into each speaker cabinet, you need to plug in the power cord supplied with each speaker. Plug in each powered subwoofer power cord into the same power strip where your other system electronics are plugged in, or plug them into a grounded wall outlet.
- You will not need to connect the powered subwoofer portion of the speakers to the SUBWOOFER OUT connection of your receiver. The powered subwoofer is designed to "receive" the bass portion of the input signal from the main inputs. (NOTE: For receivers equipped with Dolby Digital, set the receiver to deliver bass to the two front/main channels only.)
- Plug in your amplifier or receiver, turn it on and start positioning your speakers and fine-tuning your system to obtain maximum enjoyment from your Powered Time Window Surroundscape system.

△ CAUTION!

MAKE SURE THERE ARE NO LOOSE STRANDS OF WIRE TOUCHING EACH OTHER ACROSS THE SPEAKER TERMINALS. THESE CAN CREATE A SHORT CIRCUIT AND DAMAGE YOUR ELECTRONICS.

FUSE PROTECTION

A speaker can be damaged if the amplifier driving it should fail. Damage may also occur by playing music so loudly it distorts. This can happen even with a low-powered amplifier. Although the Powered Time Window Surroundscape speaker is a very robust system that includes internal circuit breaker protection, fusing can provide additional protection and may be recommended under certain operating conditions. To properly install a protection fuse (not provided), a fuse holder should be inserted in the positive (+) wire connecting the speaker to your amplifier or receiver. Use a 3 ampere, fast-blow Buss AGC Series or equivalent fuse.

POSITIONING YOUR SPEAKERS

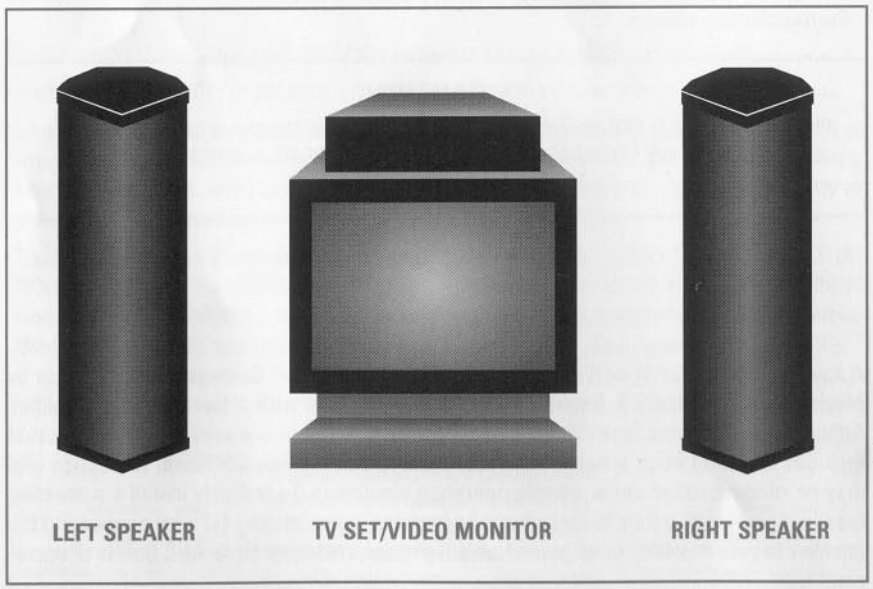
Each listening room has different acoustic characteristics. You will need to make several adjustments to how your Powered Time Window Surroundscape Speakers are positioned relative to your TV screen and to your side walls. Spending a few minutes at the beginning on speaker positioning will help ensure that you enjoy the optimum Powered Time Window Surroundscape effect possible in your listening environment. With a little experimentation, you can create not just a sonic "sweet spot" but a "sweet room" as well.

Place your speakers within three to five feet of your TV screen/video monitor. Put the left speaker on the left side of the TV and the right speaker on the right side of the TV. *(See Figure B)* This will maintain the relative relationship of the sound to the visual cues on the TV screen. When your speakers are correctly positioned, the "main" sound field will originate from between the speakers and close to the TV screen and the "surround" sound field will originate from directions not between the speakers.

If you are using the Powered Time Window Surroundscape Speakers without additional surround speakers, you will find that for each listening room there is a definite "best" distance between the speakers, typically between six and 12 feet apart, but not closer than three feet from the side walls.

If you are using additional "assist" surround speakers, the distance between the speakers becomes less critical to achieving the best surround effect, and the effective arrangements become more flexible.

(Figure B)



OPTIMIZING YOUR ROOM ACOUSTICS

Unlike conventional surround systems, the Powered Time Window Surroundscape speakers use the side and rear walls of your room to "bounce" the surround sound waves to the appropriate location in the room. This process provides a very even distribution of surround sound to both the side *and* rear of the listener.

For best results:

- Remove obstructions, such as drapes or furniture, between the outside/surround facet of the speakers and the walls. Also, avoid placing the speakers near open doorways.
- "Deaden" the front half of your room (where the Powered Time Window Surroundscape Speakers and TV screen are) with sound absorbing materials.
- "Enliven" the rear half of your room with hard surfaces to enhance sound reflection. (NOTE: This "live end/dead end" room optimizing strategy is characteristic of good audio listening room design in general.)

TUNING YOUR SYSTEM FOR BALANCED SURROUND SOUND

You are now ready to use the test tones built into your surround receiver to tune your system. By following these basic steps you will be able to hear the main, center and surround speakers independently of each other and balance your system for the best possible performance.

- Turn on the test-tone function of your receiver. Many receivers let you control this function with a remote control unit so you can adjust your test tone volume and time delay settings from your listening position.
- Set your center channel volume to the "zero" reference. (NOTE: This reference point may have a different name, depending on the receiver manufacturer.)
- If you are using the Powered Time Window Surroundscape Speakers without other surround speakers, the test tone sound is sent around the listener from the front. The Powered Time Window Surroundscape Speakers generally need less rear channel delay than conventional charts suggest. Set your surround channel delay time to 15 ms or less.
- If you are using the Powered Time Window Surroundscape Speakers with other surround speakers, use the settings the receiver manufacturer suggests for your room size.
- Experiment with your settings in combination with the rear channel output volume in order to achieve the most realistic results.
- Adjust your rear channel volume so that the test tone is prevalent on either side and to the rear of your listening position. If you are not using additional surround speakers this setting is generally 3 to 7 dB higher than the main and center channel settings.
- If the rear channel test tone appears to come from between the main speakers, reverse the speaker wires for one rear channel only. This means removing the positive (+) wire connected to one of the positive (red) REAR CHANNEL speaker input terminals and connecting it to the negative (–) terminal, and connecting the negative (–) wire you just disconnected to the positive (red) terminal. After switching the wires, the position of the surround test tone should be outside the main speakers and near the rear. (This compensates for the fact that the rear channels of some receivers are wired out-of-phase for more dramatic surround sound results.)

PERFORMANCE OPTIONS

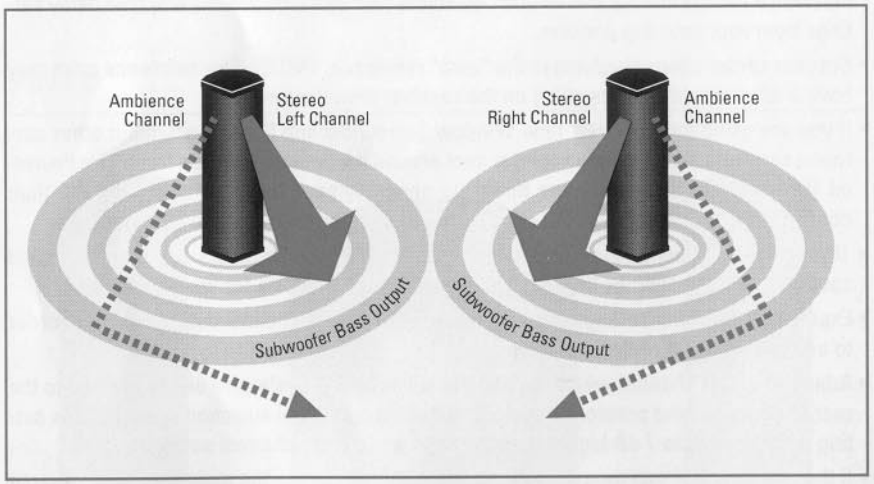
One of the strongest advantages of the DCM Powered Time Window Surroundscape Speaker design is its flexibility. These speakers can be easily adapted to meet your changing audio and home theater needs, as well as the requirements of current and emerging surround technologies. Please choose the set-up option that is most compatible with your room, your associated electronics, and your performance needs.

OPTION #1: STEREO MUSIC SYSTEM (2 SPEAKERS)

This is the configuration for using your Powered Time Window Surroundscape Speakers as a "stereo" pair in a traditional stereo system for music reproduction. *(See Figure C)*

- Connect the LEFT stereo output from your amplifier or receiver to the LEFT main input of the LEFT speaker, and the RIGHT stereo output to the RIGHT main input of the RIGHT speaker.
- If your receiver or amplifier also has MATRIX, AMBIENT or REMOTE speaker outputs, connect the LEFT ambient or remote output to the LEFT SURROUND speaker input and the RIGHT ambient or remote output to the RIGHT SURROUND speaker input. This can greatly expand the scope and power of your stereo music system, and enlarge the stereo "sweet spot". If you currently have a stereophonic receiver or amplifier, there are external "matrix" decoders available which work well when the SURROUND speaker channels are connected to the SURROUND outputs of the passive matrix decoder.

(Figure C)



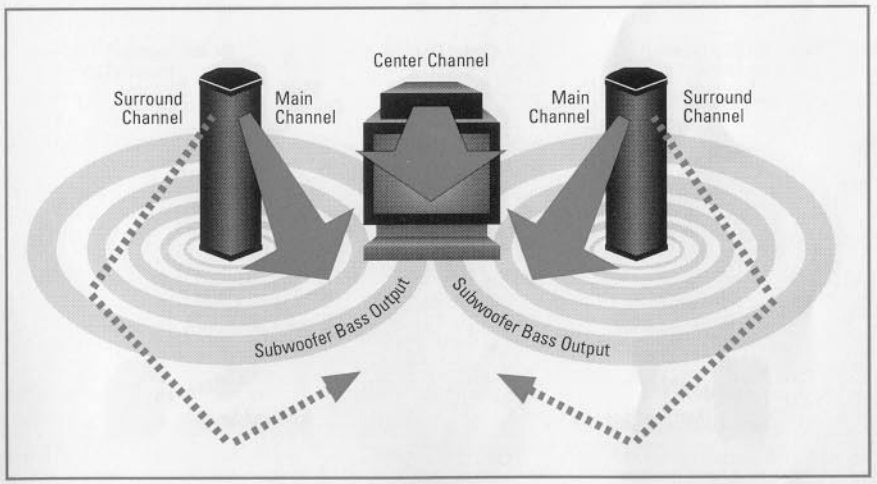
OPTION #2: HOME THEATER SYSTEM WITHOUT ADDITIONAL SURROUND SPEAKERS (3 SPEAKERS)

Sometimes, because of space or wiring considerations, it isn't practical to have surround speakers in your home theater system. This option, when used with a Dolby Pro Logic surround receiver, provides enveloping surround sound without the need for additional surround speakers in the rear of your room. In most rooms, the effect is similar to the set-up in a movie theater, with the sound field spread in an arc in front of the listener. In a live room with good reflecting acoustics, you can even hear the illusion of sound behind the listening area if the listener is seated in the middle of the listening room. The enveloping effect is maximized if the first reflected sound from the side walls is angled off to the side of the listener. *(See Figure D)*

In this configuration:

- Connect the LEFT MAIN output from your receiver to the LEFT MAIN input of the LEFT speaker, and the RIGHT MAIN output from your receiver to the RIGHT MAIN input of the RIGHT speaker.
- Connect the LEFT SURROUND output to the LEFT SURROUND speaker input and the RIGHT SURROUND output to the RIGHT SURROUND speaker input.
- In this configuration you will also need a center channel module, so attach the CENTER CHANNEL (+) and (–) outputs from your receiver to a DCM Surroundscape Center Channel Speaker or a similar timbre-matched center channel loudspeaker.

(Figure D)

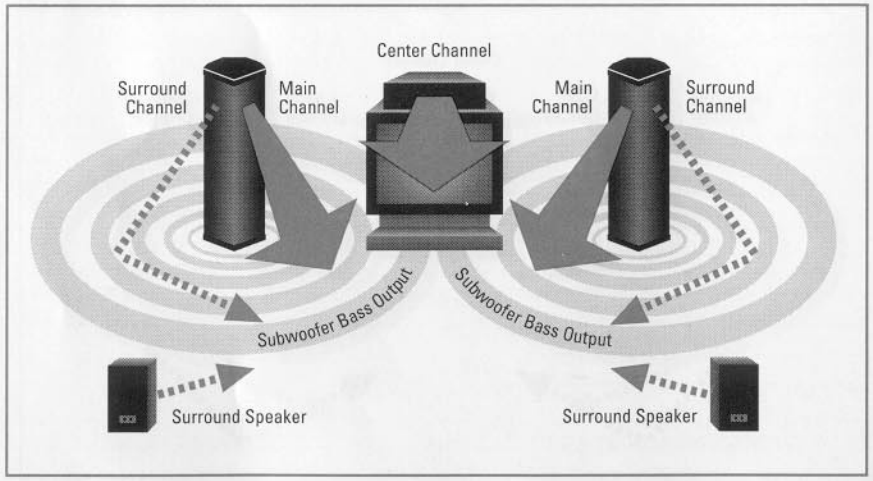


OPTION #3: HOME THEATER SYSTEM WITH ADDITIONAL SURROUND SPEAKERS (5 SPEAKERS)

DCM Powered Time Window Surroundscape Speakers also expand the performance of home theater systems with additional surround speakers. *(See Figure E)*

- Connect the LEFT MAIN output from your receiver to the LEFT MAIN input of the LEFT speaker, and the RIGHT MAIN output from your receiver to the RIGHT MAIN input of the RIGHT speaker.
- Connect the LEFT SURROUND output to the LEFT SURROUND speaker input and the RIGHT SURROUND output to the RIGHT SURROUND speaker input.
- To put your surround speakers "in parallel" with the surround side of the DCM Powered Time Window Surroundscape Speakers, attach the speaker wires from your left surround speaker's LEFT (+) and (–) input terminals to the LEFT Surroundscape speaker input terminals and the speaker wires from your right surround speakers RIGHT (+) and (–) input terminals to the RIGHT Surroundscape speaker input terminals.
- In this configuration you will also need a center channel module, so attach the CENTER CHANNEL left and right outputs from your receiver to a DCM Surroundscape Center Channel speaker or a similar timbre-matched center channel loudspeaker.
- This configuration works best when your listening position is not directly against a rear wall. In that position, the listener may or may not achieve additional benefits from the surround speakers.

(Figure E)

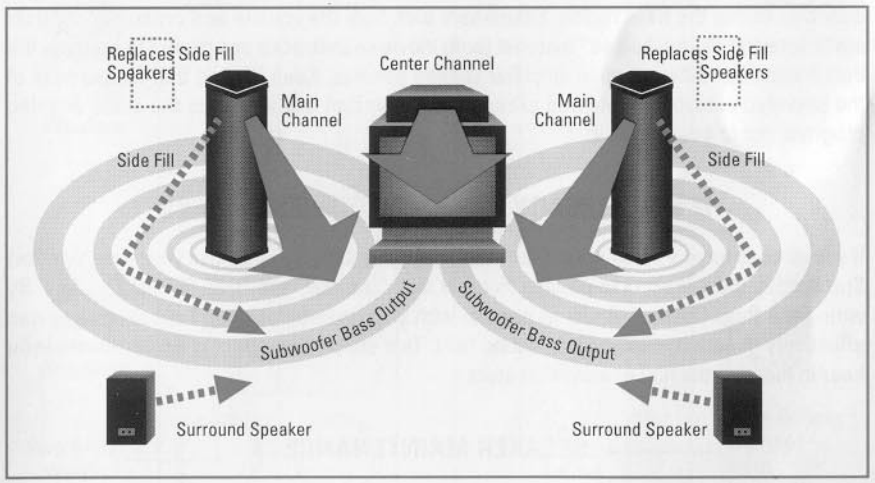


OPTION #4: HOME THEATER SYSTEM WITH ADDITIONAL SURROUND AND SIDE FILL SPEAKERS (7 SPEAKERS)

This option provides the most flexibility and best surround effect. It takes advantage of the new 7-channel surround receivers, yet only requires five speakers. *(See Figure F)*

- Connect the LEFT MAIN output from your receiver to the LEFT MAIN input of the LEFT speaker, and the RIGHT MAIN output from your receiver to the RIGHT MAIN input of the RIGHT speaker.
- Connect the LEFT FRONT AMBIENCE/FRONT SURROUND output of your receiver to the LEFT SURROUND speaker input and the RIGHT FRONT AMBIENCE/SURROUND output to the RIGHT SURROUND speaker input. The Surroundscape speaker tower will now provide the side fill sound information, without the need for side fill or front surround/ambience speakers.
- Connect your additional surround speakers to the SURROUND speaker outputs from your receiver as indicated.
- In this configuration you will also need a center channel module, so attach the CENTER CHANNEL left and right outputs from your receiver to a DCM Surroundscape Center Channel speaker or a similar timbre-matched center channel loudspeaker.

(Figure F)



FINE TUNING YOUR SYSTEM

Your complete Powered Time Window Surroundscape Speaker system should now be tuned for balanced surround sound performance. If the sound energy is still not distributed to appropriate locations in the room, take the following steps:

- Double-check the speaker wiring and settings on the receiver
- Change the distance between the speakers–move them further apart or bring them closer together.
- Turn the loudspeakers slightly inward or outward to change the angle of the sound that reflects from the walls, and listen for the sound to "lock in". This will be the optimum position for surround sound performance in your room.
- If you want more surround sound effect, you can turn up the output of the surround channel, or achieve stronger and more uniform surround envelopment by using additional surround speakers.
- If you want to use your system to play music, try other main channel parameter adjustments such as HALL, THEATER, MATRIX or other settings available on your receiver.

ADJUSTING SUBWOOFER OUTPUT LEVELS

Each Powered Time Window Surroundscape Speaker includes a built-in 100 watt power amplifier that drives two woofers in a separate bass chamber in each cabinet. Two controls are on the back of each speaker. One control adjusts the volume of the bass output and the other adjusts the midbass crossover point, allowing the emphasis of higher or lower frequencies within the bass region. Experiment with both the volume and crossover controls while listening to "full bodied" material (both movie soundtracks and music) to produce the best balance at different main amplifier volume settings. Keep in mind that the purpose of the powered subwoofer is to add excitement, dimension and impact to the audio or video program, not to overpower it.

IF YOU ALREADY HAVE SURROUND SPEAKERS

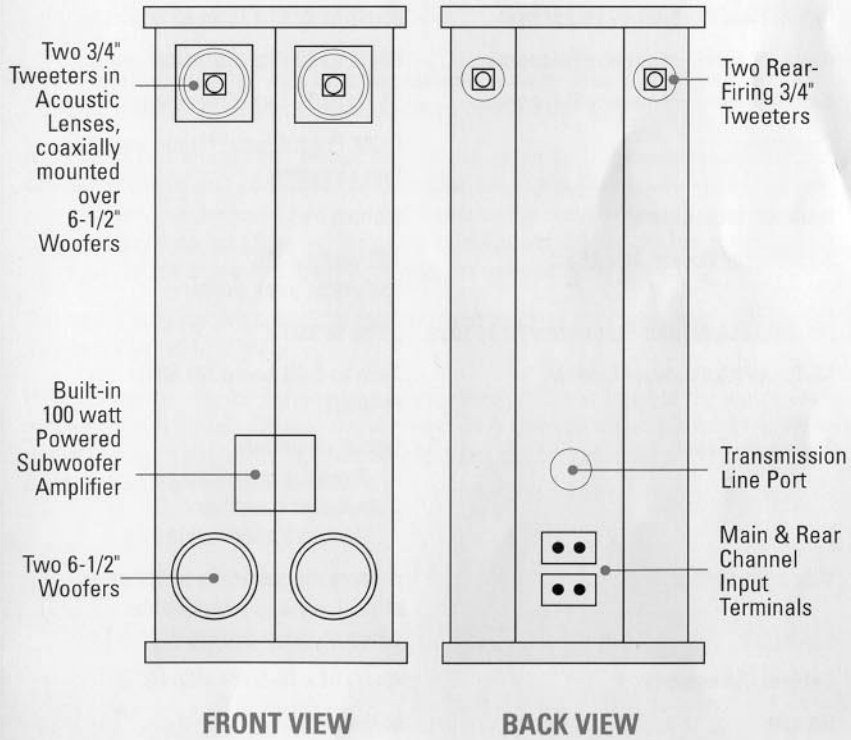
If you already have a conventional surround sound system, you may use your Time Window Surroundscape Speakers to provide front, or main channel, and "side fill" information. By wiring the Rear Channel inputs in parallel with your existing surround speakers, you can effectively generate a 360-degree sound field. This enveloping effect is similar to what you hear in many of the newer movie theaters.

SPEAKER MAINTENANCE

The speaker tops and bases may be cleaned by wiping them with a soft, damp cloth. If necessary, you may use a light household cleaner or a light wax cleaner. Avoid all ammonia or acetone-based cleaning products. Wipe dust from the grille with a piece of felt or vacuum carefully to remove dirt and pet hair. Do not place the speakers near a radiator or other heat source such as direct sunlight. Excessive heat will cause the finish to fade over time.

TROUBLESHOOTING AND OBTAINING SERVICE

DCM loudspeakers have a history of extremely high reliability. If, however, your Powered Time Window Surroundscape Speakers are not working properly (no sound comes out of the drivers), please inspect all connections and review the instructions in this booklet. If you still a problem, please contact your DCM retailer. If this is inconvenient, please contact DCM Corporation directly. Your Powered Time Window Surroundscape Speakers have no user-serviceable parts and should be serviced by authorized DCM technicians only. We recommend that you keep your cartons and packing materials. If you need to transport or ship a speaker for service, it will help prevent damage to the speaker during transit.



TECHNICAL SPECIFICATIONS

DCM Powered Time Window Surroundscape Speakers

Driver Configuration:	(1) Direct-firing 6-1/2" polypropylene midrange/woofer (1) Ambient field 6-1/2" polypropylene midrange/woofer (2) Coaxially mounted 3/4" hard dome tweeters mounted in anti-diffraction acoustic lenses (2) 3/4" ambient field hard dome tweeters
Subwoofer Drivers:	(2) 6-1/2" woofers
Sensitivity (2.83V @1m):	92 db
Usable Power Range:	Front:/Main: 50 to 250 watts Rear/Surround: 10 to 100 watts
Direct Field Frequency Response:	35 Hz to 20 Khz (Stereo & surround)
Ambient Field Frequency Response:	80 Hz to 20 Khz (Surround mode)
Ambient Field Frequency Response:	35 Hz to 20 Khz (Stereo mode)
Crossover:	DCM PrestiDigital™ time equalization circuitry
Nominal Impedance:	6 ohms
Subwoofer Power Amplifier:	100 watts RMS 250 watts peak power
Internal Subwoofer Frequency Response:	28 Hz to 80 Hz
Midbass (Crossover) Control:	Zero to 6 dB boost for 60 Hz to 100 Hz
Enclosure Type:	Upper chamber: Acoustic suspension Subwoofer chamber: Vented transmission line
Video Shielding:	Drivers magnetically shielded to minimize video interference when in close proximity to a TV
Cabinet Dimensions:	43-1/2"H x 16-1/2W x 12-1/2"D
Weight:	60 lbs.
Finish:	Black wraparound grille, Black solid top and base

LIMITED WARRANTY

DCM Powered Time Window Surroundscape Speakers

This DCM loudspeaker is intended for the reproduction of music in residential premises only and is warranted against defective materials or workmanship for **a period of one year on the amplifier and five years on the speakers from the original date of purchase.** This warranty extends to the original purchaser from an authorized DCM retailer only.

Defective parts will be repaired, adjusted or replaced with no charge for materials or labor if the purchaser returns the loudspeaker together with the **original sales receipt** or other proof of purchase at the purchaser's expense to DCM Corporation at the address below. Warranty work will be performed within a reasonable time and the loudspeaker returned to the purchaser at DCM's expense within the United States of America.

This warranty does not extend to equipment damage due to negligence, misuse, improper installation, shipping damage, abuse or accident.

No implied warranties shall extend beyond five years from the **original date of purchase.** Incidental and consequential damages are expressly excluded from this warranty and may not be recovered by a purchaser as the result of breach of any warranty. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

Please save the original carton and packing material. If you move or the loudspeaker requires service, pack the unit in this carton. Any damage in transit due to improper packing is not covered by the warranty and will not be recognized as an insurance claim by transportation companies.