



## **HOME THEATER HANDBOOK**

**Volume 1**

**UNLEASH A MOVIE THEATER  
IN YOUR LIVING ROOM**

**[www.myhometheatersecrets.com](http://www.myhometheatersecrets.com)**

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## WELCOME TO MY WORLD

Please fasten your seatbelt until we have reached cruising altitude...

My brother-in-law decided he needed to be the first to outdo everyone else in the family and went out and got himself a 50 inch **DLP** for his family room. He then subscribed to a Canadian satellite system for the finishing touch and was pulling in beautiful HD in no time. Of course I had to go over and help him put his stand together (he's a chiropractor... not very good with building things) and at the same time tell him how great his new TV was. **We discussed where the new TV should go based on the structure of his room... he disagreed with my point of view and placed it where his wife (my sister) wanted it to go. Funny thing... 2 years later the TV now sits in the exact spot I had recommended.**

My father-in-law called me one morning as I washed my car and asked me to accompany him to go buy a new TV. **After I discussed the pros and cons of each technology with him, he ended up getting himself a 42 inch LCD for his family room.** He subscribed to a Canadian satellite system for the finishing touch and then began pulling in beautiful HD. It should be noted that I not only had to build the stand, but hook up the satellite and preprogram all the local channels.

One night I got a call from one of my wife's relatives who had heard that I helped my father-in-law buy a TV. I was asked to accompany him so he could purchase the same TV my father-in-law bought. **After all was said**

**and done (and visits to 2 different stores), he ended up using my advice and getting a 50 inch plasma.** He decided against the satellite subscription and went strictly local channels. The TV and stand were delivered and set up in his house by the delivery guys.

My mother figured it was about time that we upgraded my father's 10 year old rear projection television. **So once again I headed to the TV store to decide what type of television would suit my father's needs. We decided on a 50 inch DLP with integrated HDTV tuner so he could get the local channels.** We knew that we were not going to hang the TV, so the thinness of the set didn't matter, and the DLPs are the thickest, compared to the plasma and LCD. The TV was placed in the worst part of the room, but there's no arguing with my mom.

A cousin of mine complained that he couldn't get his **5.1 Dolby Digital** system working with his rear projection television. He told me the speaker layout he preferred, and **I was able to correctly integrate his system into the living room under one condition stipulated by his parents... no holes in the walls and no wires running across the floor. Piece of cake.** (He has since moved out on his own, and his parent's have requested that I removed the surround system from the room).

All these people have one thing in common. No, it's not the fact that they're all relatives, it's the fact that when they needed help understanding audio/video equipment, they came to me. That's right... they came to me, because I'm that guy... I live for this stuff.

*“There is no magic bullet when it comes to setting up a home theater system in an existing living space. What works for your room might not work for your neighbor’s room. To measure the success of your efforts, you should ask yourself the following question when you’re done the setup: Does it look and sound good to you? If you answer yes, then you’ve accomplished your goal.”*

## **YOU'RE GONNA LOVE THIS BOOK**

You know that TV / speaker system that you want to incorporate in your family room? I can show you how to correctly arrange them to create great video and sound...arrange them so your significant other doesn't want to kill you.

How can I be so confident? I built an eleven person home theater in my basement after spending many years of my adult life researching and planning, and I've learned a few tricks you can use in any room. I should also point out that I've made a few mistakes too... mistakes that you don't have to make now.

When I put my mind to something, I work until I'm satisfied with the results... and I wanted the best home theater that I could afford. It wasn't going to be easy, but I did it, and I decided to write this first volume which contains the theories and practical knowledge that you can use to incorporate a home theater into an existing living place.

Why would I want to do this? Why put this on paper? I'm finding myself answering a lot of questions these days from people who have seen my theater and want to set up something on a smaller scale.

The price of good equipment has dropped over the years, and it is becoming more affordable for anyone to piece together a nice room. I figured if I

wrote down all these answers I was giving out, I would have a handy dandy guide for the next person who came along.

Eventually, I noticed that what I was actually doing was taking all the material I had gathered over the past 10 years, along with my experiences during the construction phase, and was creating a “real-life design, construction and calibration guide.”

**Look, I was able to replace my wife’s favorite wall mirror with a 50 inch plasma television in our family room over the fireplace. If I can do that, imagine what I can help you do...**

You don’t need to be a genius to set up things correctly, but I want you to understand a few things before we start... so listen up.

- If you feel that you want to try something listed here in this volume but are uncomfortable because you are not the “handyman” type, then I suggest that you either get someone to help you, or hire a professional. I want to give you the knowledge, but I don’t want you to hurt yourself, or destroy your home. So get help if you need it... I’m stubborn, and yet I asked for help when I needed it; don’t be a hero.
- If you are convinced you want to complete the setup in one day, make sure you do the majority of it during business hours. What I’m

getting at is this... How would you feel if, during your setup, you ran out of speaker wire and it was 7pm? ... Too bad for you, the store is closed. I had this happened to me, and it sucks.

What you will not find in these pages is all the stuff you see in the manuals that you get with your equipment. I will not insult your intelligence by photocopying “hookup” diagrams from your manual pages... I don’t want to waste your time, or your money. I’ve finally learned how to use my architect software, which I used to create the family room diagrams, so use the techniques in the book with the owner’s manuals of your equipment.

### **Non-Dedicated Theater vs Dedicated Theater**

You may, from time to time see me reference the words “dedicated” and “non-dedicated” when referring to home theaters.

Simply put, the major difference between the “non-dedicated” and “dedicated” home theater is the room itself. The dedicated home theater is a custom room designed to reproduce audio/video just as the movie director intended, and the non-dedicated home theater is a setup integrated into a living space that is used for purposes other than watching movies.

## THE SECRET... shhhhh

When it comes to setting up your TV and surround system in a room that is also a living/family room, your options are limited when it comes to the placement of the TV and surround speakers. Sure, you have a pretty good idea where the TV is going to go, but if you really want to enjoy great sound when you watch a movie, will that TV placement let you maximize the sound of your speakers?

Setting up an audio system in an existing family room is difficult because you don't have a lot of choices with speaker placement. You basically have to work around furniture that is already there. Your significant other is not going to let you move around the plants they strategically placed around the room to achieve the correct "fung shui" (and don't go emailing me to ask what that is... google it... ☺)

The secret to incorporating a home theater into an existing family room is to create a "sweet spot"... you know, a place where you're going to sit to experience the best picture and sound.

You do this by concentrating on one spot in the room where the "chosen one" will sit (that's you), and to do this successfully, you must focus on 3 different aspects of your setup; **your TV**, **your speakers** (front speakers, surround speakers, subwoofer) and **the room** itself.

By creating this sweet spot, at least three different scenarios are created:

1. When you want to enjoy a movie, and you're alone, your sweet spot will give you the best possible audio and video available.
2. When you want to impress someone that comes over, make sure they sit in the sweet spot so you will get the oooohs and aaaahs out of your friend. You can sit wherever you want in the room... you're not trying to get the best out of the audio or video at that time, you want your friend to experience it.
3. The seats directly beside your sweet spot will be the next best choices for your spouses / friends.

Now, let's set up that sweet spot!

## **CHAPTER 1: PLACEMENT OF THE TELEVISION**

*“There will always be someone out there with a bigger TV and a better sound system than you, so deal with it. Eventually, you’ll come across someone that had a bigger budget and got a better deal, so don’t get discouraged when you see their 100 inch flat screen. They may have the money, but not a clue on how to use it. You have no idea how many times I’ve been in a dedicated home theater, and the owner has no clue how to turn on his picture in picture function.”*

## PLACEMENT OF THE TELEVISION

Whether you've got a floor standing model (DLP, rear projection) or a flat panel (LCD, plasma) keep in mind that **your TV will look the best when viewed from “straight ahead” and the center of the screen is at eye level.** This isn't usually a problem with the floor standing models, but if you want to hang that flat panel on the wall with a “TV wall mount”, you'll have to come as close as you can to eye level. Also, don't forget the most wall mounts will allow you to tilt the screen down towards your sweet spot.

Where do you think the most popular place to hang this flat panel? That's right, even though it isn't at eye level, most people mount their flat panel above the fireplace.

Also remember that glare is possible depending on where your windows are in relation to your TV. Floor standing lights and ceiling lights can also cause havoc with reflections off the TV screen, so be careful.

### *Floor Models or DLPs*

The floor models can be placed anywhere within the room, but your goal is not only to have your TV in front of your sweet spot but also to **have the center of the screen at eye level.** Here are some things to consider when dealing with floor models:

- There is a “viewing distance” chart that will help you get an idea of how far the TV should be from your sweet spot to get the optimum picture quality. It won’t be much use here, as you really don’t have too much leeway in moving around the living room furniture to accommodate your TV.
- About 12 years ago, an interior decorator came to our house and walked toward the family room where he was greeted by my 48 inch rear projection TV. His suggestion to my wife? **The TV should not be the first thing you see when looking into a room**, so he suggested that I move it out of the corner it was in and place it in the opposite corner where it wouldn’t be seen until you entered the room. Now I guess you’re wondering what I did... it was early in my marriage... I moved it.
- Even though you may be able to buy a floor model that is relatively thick (rear projection models), **do not place any of your components on top of your TV**. Over time, this will warp your TV screen and that is not something you want to do... purchase a cabinet or use the TV’s built in stand to house your components.

- When you eventually find the ideal place for your TV (whatever looks best for you), find a seat that is directly in front of the TV (or closest to the direct front), and focus all your speakers to that spot.
- When dealing with DLPs, make sure you **leave enough room behind the set for ventilation**. These TVs tend to pump out a lot of heat from the rear, so be careful. Some people I know have also noticed the hum of the fan within the set itself. This can be annoying... make sure you see/hear the TV in action at the store before you buy.
- If you have small, curious children/pets, **try to place the TV out of the way of high traffic areas**. You don't need your screen scratched by a toy or inanimate object when someone walks by. I have seen people temporarily place "hard to crawl over" objects such as a plants or decorative sculptures in front of the TV to prevent their children from getting to the screen. Just make sure these objects are short enough to see over... you don't want to block the TV screen from view.

### *Plasmas and LCDs*

Here are a few things to consider with flat panel (LCD, Plasma, etc) models that are going to be mounted on a wall:

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