

# SUBstage™ 100

flatmagic™ active subwoofer

## operation manual



*Use the SUBstage100  
Plug+Play Set-Up Guide  
to connect your new  
soundmatters system*

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**soundmatters, inc.** san francisco, california  
**tel** 415.255.1960 **toll-free** 800.698 SOMA **fax** 415.255.1965  
**email** support@soundmatters.com www.soundmatters.com

rev 3.05G1-sub100

## Important Safety Precautions

### CAUTION – Risk of electric shock – Do not open

**USA and Canada: To prevent electric shock, match wide blade of plug to wide slot, insert fully.**

- 1. Read instructions** – All the safety and operating instructions should be read before the product is operated.
- 2. Retain instructions** – The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings** – All warnings on the product and the Users Guide should be adhered to.
- 4. Follow instructions** – All operating and use instructions should be followed.
- 5. Water and moisture** – The product should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool and the like.
- 6. Location** – This product should be placed in a stable location. Placing the product in an unstable location such as an unstable cart, bracket or table, may cause the product to fall, causing serious injury to a child or an adult, and serious damage to the product.
- 7. Ventilation** – Slots or openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. Placing the product on a bed, sofa, rug or similar surface should never block the openings. The product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 8. Heat** – The product should be situated away from the heat sources such as radiators, heater, registers, stoves or other appliances that produce heat. If placed near an amplifier, check with the manufacturer for the applicability.
- 9. Power Sources** – This product should be operated only from the type of power source indicated on the marketing label. If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.
- 10. Power-cord protection** – Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from products.
- 11. Cleaning** – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 12. Non-use periods** – The power cord of the product should be unplugged from the outlet when left unused for long periods of time.
- 13. Lightning** – For added protection for this product during a lightning storm, or when it is left unattended or unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges. A surge-filter can also prevent damage and is recommended.
- 14. Overloading** – Do not overload wall outlets, extension cords, or integral convenience receptacles, as this can result in risk of fire or electric shock.
- 15. Object and liquid entry** – Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid or any kind on the product.
- 16. Damage requiring service** – Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
  - a. The power supply cord or plug has been damaged; or
  - b. Objects have fallen onto, or liquid has been spilled into, the product; or
  - c. The product has been exposed to rain or water; or
  - d. The product does not operate normally when following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore this product to its normal operation; or
  - e. The product has been dropped, or the enclosure damaged; or
  - f. The product does not appear to operate normally or exhibits a marked change in performance.
- 17. Attachments** – Do not use attachments not recommended by the product manufacturer, as they may cause hazards.
- 18. Replacement parts** – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
- 19. Safety check** – Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- 20. Servicing** – Do not attempt to service this product yourself, opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 21. Wall Mounting** – When wall mounting, it is important that both the product and any other items such as pictures, shelving and contents are mounted secure to withstand the normal operation (vibration) of the product.

### This warranty does not cover:

- Damage that is the result of misuse, abuse, accident (including but not limited to damage by water), faulty hookup, defective or maladjusted associated equipment, or the use of the Product with equipment for which it was not intended.
- Cosmetic defects that appear more than thirty (30) days after the date of purchase. Cosmetic damage caused by improper handling is also excluded.
- Products that are used for commercial purposes.
- The cost of removing or reinstalling the Product.
- Damage that occurs while the Product is being shipped to whoever will service it. See the information above regarding shipping procedures.

### This warranty is void if:

- The Product identification or serial number label is removed or defaced in any way.
- The Product is serviced or repaired by any one other than soundmatters or an authorized soundmatters dealer or service agency.

### For warranty information contact:

soundmatters, inc san francisco, ca 94110

phone 800-698 SOMA (800-698-7662) email: [service@soundmatters.com](mailto:service@soundmatters.com)



CAUTION  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN  
ATTENTION  
RISK DE CHOC ELECTRIQUE  
NE PAS OUVRIR



## 7. Warranty/Service

There are two things you must do to ensure trouble free service in the event you need warranty repairs.

1. Keep your original sales receipt in a safe place. A copy of the receipt will be required to obtain warranty service.
2. Be sure your retail dealer has written the date, the model number, and the serial number (if applicable) of the Product on the receipt.

To give yourself an extra measure of protection, make a separate record of the information about your purchase and keep it in a safe place. In the event you misplace the sales receipt, your dealer may be able to give you a copy. Take a moment now to read the terms of your warranty. Check to be sure your sales receipt is dated and has the Product model number and serial number (if applicable) on it. Then put it away in a safe place.

When shipping a product in for service:

- Email or call soundmatters for the proper ship to address for servicing and an RMA (return merchandise copy of your original sales receipt that has the date, the Product model number and serial number (if applicable) written on it. You must place your RMA number on the shipping label of any unit returned to soundmatters for service.
- Always ship Products in the complete original packing material.
- Avoid shipping Products via the Postal service. If you must use the Postal service, be sure to register and insure the package.

### soundmatters Limited Warranty

soundmatters, inc. (soundmatters) warrants to the original consumer purchaser of the soundmatters Products described in this manual, that the Product will be free from defects in materials and workmanship for a period of five (5) years on speakers and two (2) years on the electronics after the date of purchase. soundmatters' sole obligation under this warranty shall be to provide, without charge, parts and labor necessary to remedy the defects, if any, that appear during the warranty period.

This warranty is the sole and exclusive express warranty given with respect to the Product. All other express warranties are hereby excluded. Neither soundmatters nor the authorized dealer who sells the Product is responsible for indirect, incidental, or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

**IMPORTANT** – Keep your original sales receipt. Be sure the retail dealer has written on it the date, model number, and serial number (if applicable) of the Product. This information is required for warranty service. Be sure to obtain and retain proof of shipment.

### This warranty is limited to:

- Products purchased from authorized soundmatters retail dealers in North America. If purchased outside of North America, contact your local soundmatters' distributor for warranty details. soundmatters will supply a list of authorized U.S. dealers or international distributors on request

In order to obtain service you must:

- Return the Product, freight prepaid, to the soundmatters dealer from which it was purchased, an authorized soundmatters independent service agency, or to soundmatters. If necessary you may call soundmatters Customer Service Department for the names and addresses of authorized independent service agencies in your area.
- Provide proof of purchase in the form of a copy of your original sales receipt, the date, model number, and serial number (if applicable) of the Product must be written on the sales receipt.

## Introduction

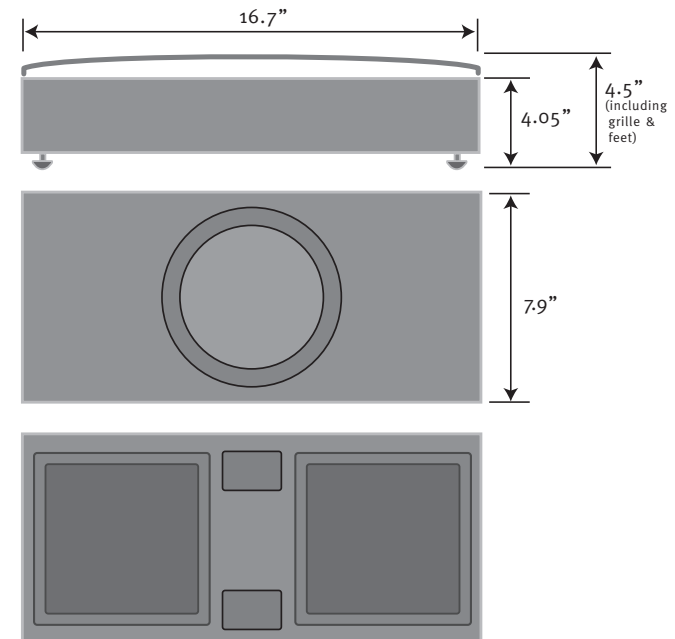
Congratulations on your purchase of the SUBstage100. In a world of big box cubes, it is truly a unique subwoofer – combining powerful “fast” detailed bass in a remarkably slim, simple-to-hide cabinet. SUBstage utilizes soundmatters' patented LMD neodymium-sandwich speaker technology in a revolutionary flatmagic™ “moving wall” enclosure.

Enjoy it singly, or in a multi-sub system. A single SUBstage reproduces deep, detailed bass response at sound levels suitable for most listening applications in small to medium rooms. For larger spaces, or for those listeners who prefer more SPL, we suggest one or more additional SUBstages. The SUBstage has been designed to make “daisy-chained” installation remarkably easy. (see Using Multiple SUBstages on page 7).

Though it can be operated and enjoyed right out of the box, taking a few minutes reading this manual to discover the available fine-tuning adjustments will help insure you get maximum performance from your investment.

Should you have any questions about your SUBstage, please contact your soundmatters SUBstage dealer. Or visit our website at [www.soundmatters.com](http://www.soundmatters.com). Or contact us directly at 800/698-7662. Or email to [support@soundmatters.com](mailto:support@soundmatters.com).

## Dimensions



## 1. Location

### a. Where to place it – behind a TV cabinet, under a love seat, on the wall, etc...

SUBstage's remarkably small size, and the fact that bass sounds are much "less directional" (less easy to detect where it's from) than the upper tones, makes it possible to place your SUBstage(s) almost anywhere in the room. That said, location does affect the sonic characteristics of any subwoofer.

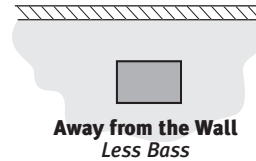
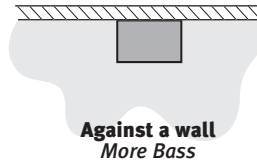
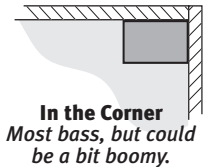
Consider the following:

#### • Place it close to the main speakers or MAINstage

Given the option, placing a single subwoofer near your main speakers (ideally between) or close to your MAINstage will help integrate the sound. In many rooms, "hiding" your SUBstage behind a TV cabinet may be ideal.

#### • More walls, more bass

Basically the bottom line is: the more surfaces (walls, floors) that a speaker is close to, the more bass (though not necessarily the best).



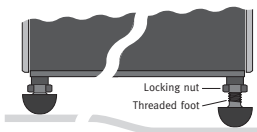
**TWEAKERS TIP** – One way to determine the absolute best sounding location for your SUBstage is to hook it up and place it on the floor exactly at your normal listening position, put on something with lots of bass. Walk around to the various possible locations for the sub...wherever it sounds best is your best-sounding SUBstage location.

#### • Provide adequate clearance

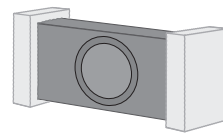
The speakers built into the SUBstage (both front and back) literally move out of the cabinet when you listen to loud or dynamic music – by as much as half an inch. Make sure there is adequate clearance and that all cables are run so not to be hit by driver excursion (which will cause rattles and buzzes).

### b. Properly Orient/Secure your SUBstage

• Adjusting the legs/feet – your SUBstage comes from the factory with its 4 support legs adjusted for minimum height possible for cable clearance. If on an uneven surface, adjust as necessary so the top of SUBstage is level. Make sure all nuts are tightened so they don't rattle.



• When SUBstage is mounted upright between a wall and furniture – such as, TV cabinet or armoire – the biggest challenge (as there are no absorption feet are on the narrow side of the cabinet) is to securely brace it to avoid box movement and vibration. Consider using the two included foam packing endcaps placed on the unit, then securely wedge the "package" into place. Take care that all wires and cables are carefully laid to avoid interfering with the speaker movement in front or behind your SUBstage.



• A secure wall-mount installation provides perhaps the ultimate in performance. Use our optional wall mount brackets, available from your local dealer or [www.soundmatters.com](http://www.soundmatters.com).

**CAUTION:** If attached to a wall, the SUBstage will literally "shake the walls" so make sure that the SUBstage is very securely mounted and that any pictures, shelving with knickknacks, etc. are firmly attached to the wall – basically "earthquake-proof".

## 6. Specifications

- Power Supply : Digital 130kHz, 100–265Vac 150W
- Configuration: Sealed FlatMagic™
- Drivers: Forward-firing, patented, 6" neo-sandwich with dual rear-firing "moving-wall" radiators
- Frequency Response: 35–200Hz, ±3dB 1w/1m (anechoic)
- Low Pass Crossover: 12dB/oct initial, 48dB/oct ultimate
- Phase Adjustment: Continuously variable 0–180°
- Continuous RMS Power: 100 Watts
- EQ Settings (70Hz): Flat, +3dB
- Inputs/Outputs: Line Level single RCA and 1/8" stereo mini-jack (bi-directional)
- Cabinet (HxWxD): 4.05" x 16.7" x 7.9" – with feet, without grille (103 x 424 x 201 mm – with feet, without grille)
- Weight (approx): 14 lbs (6.3kg)

soundmatters® believes in a policy of continuous product improvement, therefore specifications are subject to change without prior notice.

## 5. Troubleshooting

Having a problem, check the items below. After that, if still a problem – contact your dealer, look for updates at [www.soundmatters.com](http://www.soundmatters.com), or contact soundmatters tech support.

### 1) No sound

- Check that MAIN power switch is on
- Check that cables are connected at both ends – check both the AC cord and the source cable.
- Confirm that you have playback on the rest of your system.

### 2) Buzzes with sound playing

- Make sure that the SUBstage is on a flat surface or is level.
- Make sure that the extended front or back woofer movement isn't touching anything, such as the cables.
- Make sure the nuts on the leveling feet are tightened.
- Reduce level.

### 3) Buzzes or hums when no sound is playing

- Check cable connections
- Replace bad cable

### 4) Cabinet wants to move or “walk”

- Make sure that rubber feet are attached.
- Provide additional pressure to weight down the cabinet
- Reduce level.

### 5) Not loud enough

- Increase level on back, but first, make sure you've completed the phase adjustment on pages 6 and 7.
- Move EQ switch to “+3dB” position
- Move closer to a wall or corner
- Add an additional SUBstage to the system

### 6) Distorts

- Confirm that cabinet is level
- Reduce volume

### 7) Too much Bass

- Reduce level
- Slightly adjust crossover point counter clockwise
- Move EQ switch to “O” position
- Move away from the corner or wall

### 8) Sound cuts out

- Confirm that cables are firmly connected
- Reduce level

### 9) Transition between main speakers and SUBstage seems weak

- Increase crossover point by turning clockwise

### 10) Hear a thump on initial turn-on or during the startup of a DVD

- This is normal

## c. Optional Mounting Kits

### • Décor Display Pedestal

Turns the SUBstage into an elegant work of art. Includes heavy steel stand and cosmetic grilles (adds symmetry and hides controls). Instructions are included with the kit.

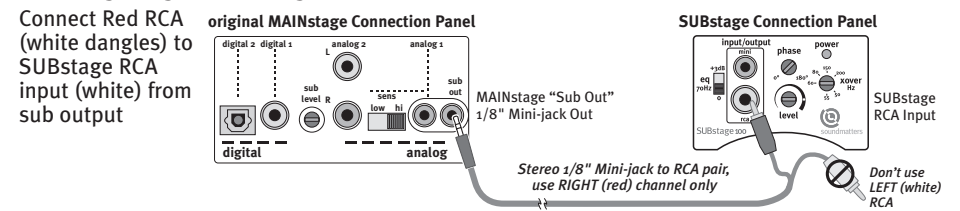
### • Wall Mount Kit

Includes wall and product mounting rails to secure the SUBstage to wall stud(s).

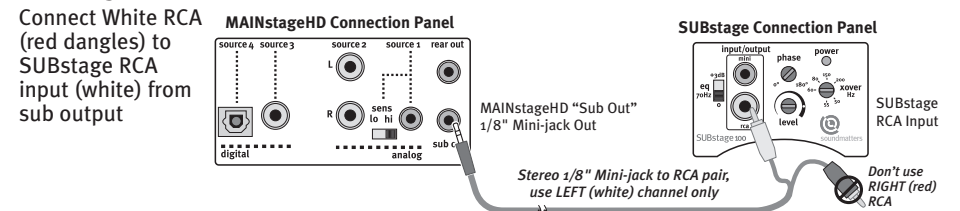
## 2. Connections

### Signal Connection

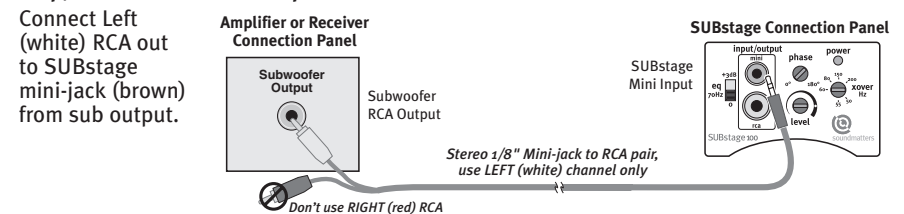
#### MAINstage Original or Dialog models



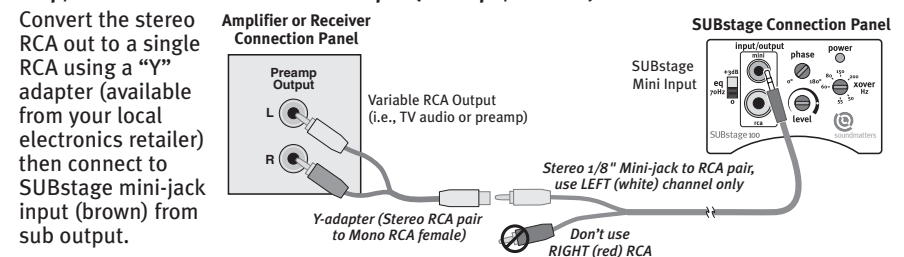
#### MAINstage HD or other models



#### Amp/Receiver with SUB Output



#### Amp/Receiver with Variable RCA Output (not Tape/Rec Out)

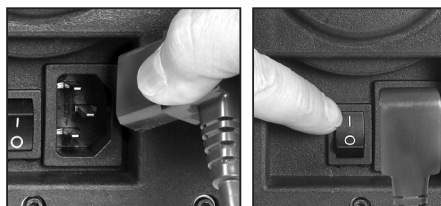


### Power

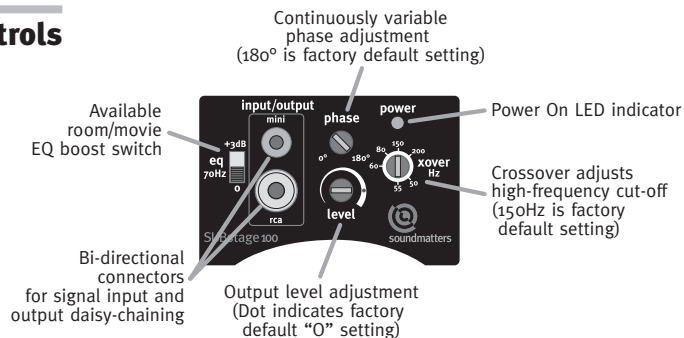
Connect the supplied right-angle power cord into the back of the SUBstage and connect to the wall, 100–265 Vac

Switch Master Power to On position.  
ON=I, OFF=O.

The SUBstage automatically switches from standby to ON mode when it senses an audio signal and switches back to standby mode if no signal is present.



### 3. Controls



#### Control Settings

Start with these pre-set factory settings then experiment for best sound in your system.



**Level:** 0 (indicated by the dot)

**Crossover:** 150Hz

**EQ:** 0dB

**Phase:** 180° for any MAINstage, or 0° for other speakers

- **Level matching** – Use the SUBstage level control to provide a smooth transition to the main speaker system.
- **Crossover (xover) frequency matching** – This sets the upper frequency limits of your SUBstage and is used to help provide a smooth transition between your main speakers (or MAINstage) and your SUBstage.
- **EQ** – provides +3dB boost for added action impact. It may be preferred when the SUBstage is not mounted in a corner or against one or more walls, or if you are a heavy movie-watcher.
- **Variable Phase** – Since your main speakers (or MAINstage) and subwoofer are separate units, they are also probably located at different distances from your ear. Depending on the locations, it is possible that this difference will cause the soundwave of the subwoofer to arrive at your ear a split-second earlier (or later) than the lows from the main speakers and therefore “out of phase” enough to cancel some mid-bass frequencies.

The SUBstage100 offers a continuously variable phase adjustment to correct this problem.

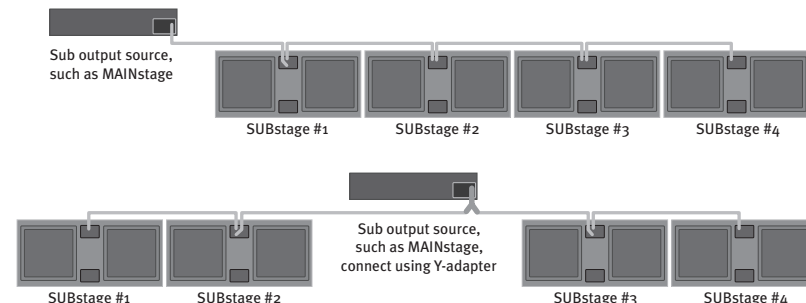
How to use it: first, enlist a friend. Then, while listening to something familiar with steady mid-bass signal (i.e., drums or electric bass), you sit in the listening location and have your friend adjust the control until you hear the most bass (the change may be subtle).

For more info on phase adjustment, visit the FAQ section of our website.

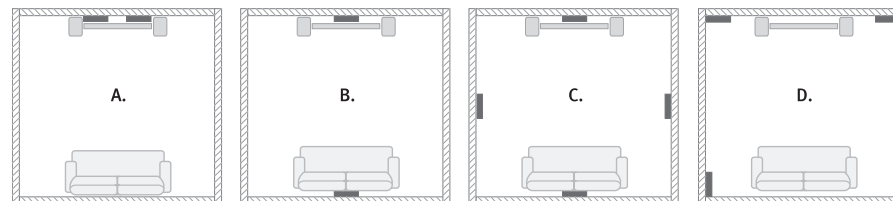
### 4. Using Multiple SUBstages

Hooking up multiple SUBstages is very simple – just a matter of “daisy-chaining” – using an RCA or Mini interconnect between each of them. Adding a second (or more) subwoofers will increase the sound pressure level (SPL) potential of your system. Additionally, the typical and problematic bass dips and peaks caused by room acoustics can often be smoothed by strategic placement of multiple subwoofers. Adding a second SUBstage will provide a dramatic improvement in most installations.

The RCA and the Mini jacks on the SUBstage accept both input and output. You can connect two SUBstages from RCA-to-RCA, Mini-to-Mini or RCA-to-Mini. Whenever using an RCA interconnect for daisy-chaining, you can use either the red or white plug.



Its unique flexibility mean the options for placing and hiding multiple SUBstages are virtually endless. Options below show: A. left & right front pair hidden behind the TV, B. discrete front and back pair, C. four on the side walls, and D. four in the corners. The SUBstage can easily be placed on the floor or mounted on the wall, and hidden behind a plant or end table or chair.



We call this a “bass-board” – multiple SUBstages stashed behind a sofa against the wall. While nicely hidden from view, you’ll hear and feel lower frequencies with awesome power.

Some people prefer to display their SUBstage in plain view, like a piece of sculpture. The optional pedestal, cosmetic front and rear grilles, and side panels will truly enhance its natural aesthetics. Even with some hidden, you may want to show off one or more.