



L10SW/L12SW

INSTALLATION/OWNERS MANUAL

Powered Subwoofer





Introduction

Introduction

Thank you for your purchase. Your new Dual powered subwoofer was designed and manufactured to deliver refined musical reproduction and vivid home theater excitement. Dual audio products are constructed using the finest quality components and we are proud of our custom designed drivers and electronics. Much effort has gone into the design of your new sub as to help you achieve years of maximum performance and pleasure. Every DUAL loudspeaker undergoes rigorous testing and quality controls at the factory to ensure years of listening pleasure. Please take a moment to read this manual prior to installing your new subwoofer. The information provided will help you obtain maximum performance.

Though this manual will refer to your receiver, the instructions and recommendations apply to all consumer amplifiers as well as A/V receivers. Dual powered subwoofers are designed for indoor use only.

Important

It is important to turn off the power to your receivers power supply before connecting the subwoofer to your system.



Placement

Indoor Placement

Your DUAL subwoofer can be placed in many convenient locations in your home, but must be placed on the floor. Do not attempt an installation that would elevate the subwoofer above floor level. You should experiment with various placements. Room Acoustics can produce large apparent differences in the sound for small changes in the placement location and adjustments to subwoofer controls. For Example, directing the woofer of a forward firing sub toward one's typical listening position and adjusting the low pass filter to 150 Hz can make the sub very directional. This means you perceive exactly where the sub is located within the room. This is not a desirable result for the most realistic audio experience.

The common thinking regarding subwoofer placement and performance is to position and adjust the subwoofer in such a way that the subwoofers low frequencies encompasses the entire room with deep powerful bass and provides the most realistic imaging experience. The amount of bass perceived increases as you move the subwoofer closer to an intersecting wall surface and the highest level of bass results are realized from placement in a corner, but should be no closer than 3" from the wall surface. The floor and corner placement (loading) are actually an important part of the Subwoofer's design. Attempt to place the subwoofer in or near the corner closest to your system's receiver to ensure the shortest possible wire or cable runs, which will result in superior performance.



Connecting Speakers

Connecting & Adjusting Your Subwoofer	IMPORTANT - When you make connections, make sure that the power switches of all components, including subwoofer, are OFF.
Power Cord	The attached power cord is to be used with a standard AC wall outlet (110 volt AC outlet capable of supplying at least 250 Watts)
Power Indicator LED	This LED is unlit when the AC power switch is OFF. It glows RED when the subwoofer is in standby mode and GREEN when the subwoofer is on or receiving an audio signal in Auto On mode.
Power Switch	The three position switch turns the AC supply On or Off and also sets the Subwoofers' AUTO ON feature. This feature is for your convenience. When the subwoofer is set in the Auto-On mode it is not necessary to power your subwoofer completely off when not in use. In AUTO ON, the subwoofer stands by until it detects an audio signal input, then the Subwoofer turns on automatically. A few minutes after audio input signals cease, the Subwoofer automatically returns to standby mode and the LED returns to RED. The subwoofer has been designed in a way that you can leave the Auto-On feature active without causing any harm to your subwoofer.
Fuse	This fuse protects against minor internal and external faults. The fuse value is indicated on the rear amplifier plate near the fuse itself. If the POWER switch is ON and the power indicator LED is unlit, unplug the power cord from the AC outlet and check the fuse by unscrewing the center piece from the holder. IMPORTANT: If the fuse malfunctions, replace it with another fuse of the same type, value and current rating. This information can be found on the fuse.
Speaker-In Terminals	Option 1. These terminals are for making connections using speaker wire. Option 2. LINE IN Jacks This jack is for input connection using an audio cable. (see options 1 & 2 on the following page)
Low Pass Frequency (LPF) Control	This feature adjusts the frequency limit for low audio signals from 50 Hz to 150 Hz. This control helps you adjust the system's low frequency balance to blend your subwoofer with the other speakers within your system. An example: If you adjust the control to the subwoofers low 50 Hz setting, the filter limits frequencies above that from being reproduced or heard from the subwoofer.



Connecting Speakers

Low Pass Frequency (LPF) Control (cont'd)

This can be a desired setting if you are using the sub in combination with tower or floor-standing speakers. If you are using satellite speakers with 5.25" cones sizes or under, you will want to move the frequency up to slightly overlap the lowest frequency the satellites can produce. If your satellite frequency response is rated at 80 Hz to 18 kHz then you may choose to move the LPF control higher to blend the highest frequency of the subwoofer slightly past the lowest frequency of the satellites. In this example you may wish to set your sub's LPF control to 90 Hz creating a mid bass coupling between your sub and the rest of your speaker system.

Level Control

Balances the loudness of the Subwoofer relative to the Front speakers and compensates for room effects on the Subwoofer's output. It should not be necessary to set the level control to maximum volume to achieve a well balanced installation, but you may need to adjust when changing between music CD's and DVDs. **Important: Use Option 1 or Option 2, but not both.**



Note: Dual recommends you use 16-gauge speaker wire for Opinion 1 when hooking your Receiver speaker outputs in making an audio connection to your Subwoofer.

OPTION 1. Connection with speaker wire - Connect speaker wires from the Receiver's front left and right speaker outputs to the Subwoofer's Speaker Level-In connections. Connect left channel to left input and right channel to right input. You have the option of connecting your main speakers to the speaker B outputs on your receiver if it is so equipped; otherwise, you have the option of connecting your main speakers using the connections on the Subwoofer. This will send the audio signal to the main speakers while funneling the low bass frequencies to the subwoofer. To take advantage of this option, connect your main speakers to the right and left outputs on the Subwoofer. Be sure you take care to maintain proper signal polarity by connecting the red wire to the red terminal, and black wire to the black terminal.

OPTION 2. Connection with audio cable - This connection employs a left/right audio cable. To use this option, your receiver should include a subwoofer Out jack, which is typical of receivers equipped with Dolby Digital and DTS 5.1 decoding. Locate the subwoofer output jack on the back of your receiver. Using a standard audio cable, connect the subwoofer output on the back of your receiver to the line-in on the back of the subwoofer. The line-out feature can be used if you choose to install an additional subwoofer to your system. The line-out would be connected to the line-in of the second subwoofer.



Troubleshooting

Distortion/Knocking

If you believe you hear obvious distortion or knocking sounds, immediately lower the volume level of your receiver. Those sounds often indicate that either the receiver or the subwoofer is being over driven and damage can result in playing CD's and DVD's at high volumes.

You should avoid turning the bass or treble to maximum levels, and refrain from using the Loudness button when the volume level is high. This can lead to costly loudspeaker failure. Distorted or unnatural sound can also indicate poor connections. Check the connections. If the sound remains poor or distorted, the subwoofer may have a problem. Please call Dual service number for assistance.



Specifications

L10SW

FEATURES

- Gain control for volume adjustment.
- Adjustable low pass 50 Hz to 150 Hz.
- Phase switch 0-180 degrees.
- High level inputs
- Low Level Inputs and Outputs.
- Sleep mode feature integrated into the power switch for signal sensing on/off.

SPECIFICATIONS

Driver: 10" Polypropylene cone with edge inverted poly dust cap

Amplifier: A/B class amplifier -

220 Watts Peak Power/100 Watts RMS

Frequency Response: 34 – 200 Hz

Dimensions with grille H/W/D: 15.75" x 12" x 14.75"

Weight: 29 lbs.

L12SW

FEATURES

- Gain control for volume adjustment.
- Adjustable low pass 50 Hz to 150 Hz.
- Phase switch 0-180 degrees.
- High level inputs
- Low Level Inputs and Outputs.
- Sleep mode feature integrated into the power switch for signal sensing on/off.

SPECIFICATIONS

Driver: 12" Polypropylene cone with edge inverted poly dust cap

Amplifier: A/B class amplifier -

270 Watts Peak Power/120 Watts RMS

Frequency Response: 28-200 Hz

Dimensions with grille H/W/D: 17.5" x 14.25" x 16.5"

Weight: 34.5 lbs.

* Power handling is based on amplifier volume never being set above the point of audible distortion.

All Rights Reserved. All specifications subject to change without notice.

Limited Warranty

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

Namsung America Inc. warrants this product to the original purchaser to be free from defects in material and workmanship, under normal conditions, for a period of five years for loudspeakers and one year for electronics and subwoofer amplifiers from the date of the original purchase. Namsung America agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new or renewed product in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase.

During the Five-Year Warranty Period

During the Warranty Period From the date of purchase and through your stated warranty period, your product will be replaced with a new, renewed or comparable product (whichever is deemed necessary) if it becomes defective or inoperative. This is done without charge to you. Replacement products are warranted for the balance of the original warranty period.

Who is covered?

This warranty is extended to the original retail purchaser for products purchased and used in the U.S.A., in the 48 contiguous states ONLY.

What is covered?

This warranty covers all defects in material and workmanship in this product. The following are

not covered: installation/ removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product.

What to do?

If the product requires warranty service, you must prepay the initial shipping charges. DUAL will pay the return shipping charges if the product is returned to an address within the USA.

Namsung America Inc.
Attn: Returns Center
21318 64th Ave. South
Kent, WA 98032 U.S.A.
Toll Free: 1-866-626-7863

Exclusion of Certain Damages

This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.



Namsung America Inc.
21318 64th Ave. South
Kent, WA 98032 U.S.A.
Toll Free: 1-866-626-7863

©2003 Namsung America, Inc.
EVOK0603-V01