Ohm Acoustics Corp.
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Walsh 300.5000 Upgrade Kit

Recommended Amplifier Power	100-300 watts
Impedance (typical)	6 ohms Ω
Frequency Response	22 - 20,000 Hz
Sensitivity @2.8 Volts	87 dB
Recommended Room Sizes	4500-8500 cu. ft.

Thank you for your ongoing support of Ohm Walsh speakers, and congratulations on your new 300.5000 upgrade kit! You should find the installation to be very straightforward. All the parts in your upgrade kit are a direct match with the old parts that they replace. The only tool you should need is a screwdriver. Your upgraded speakers will have higher treble for more defined, "airy" details on music. Reproduction of voices will sound more natural. They can also play louder.

Your kit contains:

(2) new Walsh 5000 drivers
(2) new inputs with gold-plated binding posts

Gather the following tools:

- A Philips screwdriver

Assembly:

1. Disconnect your Walsh 300 speakers from your system.
2. Unscrew the old drivers. Disconnect them from the wire on the inside of the cabinet and set them aside.
3. Lay your speaker down on its side. It's good if you can do this on a table covered with a blanket so you don't damage the finish.
4. Unscrew the old input cup and set it aside. There should be a long wire attached to it that runs up to the top where you disconnected it from the driver. You're going to replace it.
5. Screw in the new input cup in the same place where you pulled out the old one. Feed the wire up to the top. Be sure not to leave any gaps around the edge of the acoustic insulation when you run the wire past it: this fiber should be 1/3 of the way down the cabinet and cover the cross section from edge to edge.
6. Stand the speaker back upright.
7. Connect the wire clip on your new driver to the one at the end of the wire you just ran up from the bottom of the cabinet.
8. Screw down the new driver using the screws you pulled out of the old one. The only trick is making sure they're aimed correctly. The wires come out of the back of the driver on the side that corresponds to the channel they will be hooked up to (ie, back right for the right speaker, back left for the left speaker). There should be a notch cut in the mounting hole for the driver to allow them to drop in without getting pinched and there should be a sticker on the corner of the cabinet just opposite them that reads "300".
9. Reconnect your new, upgraded Walsh 300.5000 speakers to your system and enjoy the music!
10. When you've completed your audition, use the same packaging to return your old parts to the factory.

Adjustments to fit your room:

On the back of your 5000 driver, you will find a plate with four switches. These basically function as a four-band equalizer. Moving them up increases the amplitude of the affected frequency area and moving them down decreases the amplitude. However, rather than telling our customers to look at them like they would an equalizer, we gave them the titles — Room Size, Room Position, Perspective and Treble — to help the listener to get the most benefit out of them. Of course, every room is different, so, even once the switches are set in the position that would seem to be correct for your set up, it is still important to experiment until you achieve the balance that sounds the best. Some customers leave all the switches in a straight line and don't bother adjusting or experimenting with any of them; it is important to note that just because the switches form a straight line doesn't mean that the frequency response will sound the flattest in your room. This is because some controls have greater ranges than other controls. We try to not make them have any positions that sound bad.

The Room Size switch (the one on the far left) affects the lowest frequencies your speaker reproduces (up to about 80 Hz). This switch is the most important reason why the 5000 is our most versatile speaker: it can be adjusted to sound good in any size room. The walls, floor and ceiling act as acoustic mirrors and each can double the energy in your room at the lowest frequencies. This effect is known as wall-coupling. If the walls are very close together, the effect can be overwhelming (just as car stereos can often have too much bass since a car is a very small room). On the other hand, if the walls are very far apart, the music may sound a little thin. Set this to the size of your room (you can use the room sizes on the chart for our Walsh Tall product line to give you an idea of what we think is "small" or "large") and adjust to taste from there.

The Room Position switch affects the mid-bass. (~60-150 Hz) Here, too, wall-coupling impacts the performance of your speakers. In this case, the distance of the speaker from the wall changes the highest frequency where this coupling starts to take effect. This switch is designed to eliminate heaviness from this effect when it gets into the lower vocal range. This offers the listener more speaker placement possibilities. Of course, the distance from the wall will still influence the imaging, particularly the apparent sonic height. The wall behind the speakers needs to be acoustically reflective or dispersive, and the switch isn't a substitute for that. It is also crucial to have a clear line of sight between the two driver assemblies. Moving the switch down is a little like moving the speaker away from the wall: it will reduce high bass "boominess".

The Perspective switch operates mainly in the vocal range (From 130 to 3000 Hz). This is particularly noticeable with female voices. Put on some music with a female singer and sparse accompaniment. When listening from the sweet-sweep, turn the switch up, and she will appear to move forward. Turn the switch down, and she will move back toward the wall. This switch should be adjusted to taste.

Finally, **the Treble,** (operating in the range above 3000Hz). It affects only the overtones on most things. The result is a little more or less "airiness". Also, older listeners, like me, and especially males, have hearing that is probably less sensitive in these frequencies. Turning this switch up can help. By way of contrast, young girls often have very sensitive hearing in this range. For them, or just for listening to very bright sounding recordings (perhaps with lots of crash cymbals, or an old record with a lot of hissing and popping), turning this switch down may make the music seem less strident, and more enjoyable. This switch is also useful in adjusting balance for the impact that your room's decor has on the sound. High carpet, heavy drapes, books, and overstuffed furniture tend to absorb a lot of sound in the treble and make voices sound muted. Turn the switch up to compensate. Similarly, if the room has cement floors, bare drywall, hard chairs, and no curtains on the windows, the voices may be a bit harsh need some attenuation. Turn this switch down.

Caution!

Although your Ohm Walsh 300.5000 has been rated to be used with amplifiers of up to 300 Watts per channel, it is possible to damage your loudspeakers with smaller units. Heavily compressed music such as most kinds of rock, dynamic peaks in classical music, accidentally dropping the tone arm onto the record, or connecting devices into a live signal path can produce an inordinate amount of distorted power (as much as ten times the rated amount!) which is fed directly to the loudspeaker, and could lead to permanent damage.

Warning!

DO NOT remove the perforated metal can that encases the driver. The design of the Ohm Walsh 300.5000 incorporates several critically placed transmission blocks. This acoustically transparent perforated metal can has been permanently bonded to its housing to protect precise alignment and performance by these blocks. Removal or damage of the can will seriously impair performance and void the warranty.

If you have any questions, give us a call!
Toll free: 800-783-1553
Outside the US call: 718-422-1111

Good Listening!

John Strohbeen
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