# Stealth Acoustics

#### **B30G** Installation Instructions

### **Using Both Panels**

The two enclosed Stealth Acoustics' B30G panels are designed to be used together as a paired set, but may be utilized as single panels (see below). Each panel is shipped configured at 16 ohms impedance and two panels should be wired in parallel to create an 8 ohm load to match the 255R subwoofer amplifier output (or other 8 ohm amplifier). The simplest way to accomplish this is to wire from the amplifier to the first panel and then wire a jumper from the first to the second panel. Wire positive to positive (red post to red post) and negative to negative (black post to black post) using No.14 or No.16 gauge wire. The input connectors on the B30G's are large enough to accept (2) No.14 wires. You may also install "home run" cabling from each panel to the amplifier and connect them together at the amplifier. Check all connections and panel functionality before finishing the wall.

### Using a Single Panel

The B30G panels are equipped with an impedance selector jumper. For some installations there may be an advantage to using the B30G panels individually – stereo applications are an example or sometimes space is a problem making it difficult to utilize both panels. If you choose to install just one panel, move the jumper connector from the "series" position to the "parallel" position. This will reconfigure the panel to 4 ohms, greatly increasing its efficiency. If two panels are wired together in parallel with the jumpers in the "parallel" position, the resulting load will be 2 ohms. The Stealth 255R subwoofer amplifier does not support a load impedance of 2 ohms. Do not use just a single panel with the impedance jumper in the "series" position, as the 16 ohm load will not provide proper coupling to the amplifier. Check all connections and panel functionality before finishing the wall.

## Using Different Amplifiers with the B30G

Depending on how the impedance jumper is set, two panels wired together will provide either an 8 ohm load (series position) or a 2 ohm load (parallel position). The Stealth 255R subwoofer amplifier is a single channel amplifier designed to power B30G panels (in mono) at 8-4 ohms. The Stealth 255R subwoofer amplifier is available from your Stealth Acoustics Dealer. If the total load connected is less than 4 ohms or you wish to use a subwoofer amplifier other than the Stealth 255R, you will need an amplifier that produces 250 – 350 watts RMS, per channel into 8-2 ohms depending on the panel impedance jumper settings and number of panels utilized. You will also need an active crossover prior to the subwoofer amplifier, as there is no built-in crossover on the B30G panels. Many surround sound receivers have a subwoofer crossover output (check your receiver manual to be sure). If you desire stereo subwoofers, Stealth Acoustics recommends that you use four 16 ohm B30G panels connected in pairs in the same manner as described above, or two 4 ohm configured single panels.

#### **Placement**

Careful consideration should be taken in choosing the placement of the B30G panels, relative to what is on the other side of the wall. Since low frequencies radiate from both the front and rear of the panel, significant low frequency energy can permeate into any space adjoining the wall in which the panel is placed. This is true of any open-back in-wall speaker and especially important to consider with subwoofers. Exterior walls are usually a good location, as are walls that adjoin to closets, storerooms, etc.

Since the low frequencies are typically non-directional, B30G panels can be located almost anywhere in the listening space. High traffic areas and areas where large sound absorbing furniture, such as a sofa placed directly in front of the panel should be avoided. We recommend the panels be mounted as low on the wall as possible and near an inside corner if possible. The panels can be placed side by side, stacked one on top of the other or in a corner on adjacent walls. Ceiling mounting is also an option. Stealth Acoustics back boxes are recommended for all applications. Watch out for loose wiring, plumbing pipes, or anything that may vibrate within the airspace the woofer will be working, especially anything that may come in contact with the backside of the wallboard. Check all connections and panel functionality before finishing the wall.

For immediate assistance, please call: 888 865 6800 ©2014 Stealth Acoustics

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