OSD Audio IWS88 / SMP800

OSD Audio IWS88 In-Wall Subwoofer and SMP800 Amplifier Bundle Instruction Manual

Model: IWS88 (Subwoofer) / SMP800 (Amplifier)

Brand: OSD Audio

1. INTRODUCTION AND OVERVIEW

This manual provides detailed instructions for the installation, operation, and maintenance of your OSD Audio IWS88 In-Wall Subwoofer and SMP800 Class D Mono Amplifier bundle. This system is designed to deliver powerful, deep bass for home theater and audio systems while integrating discreetly into your living space.

The bundle includes:

- **IWS88 In-Wall Subwoofer:** A passive subwoofer featuring dual 8-inch drivers, designed for flush installation within a wall. It handles up to 350W of power.
- **SMP800 Class D Mono Amplifier:** An 800W amplifier specifically designed to power passive subwoofers. It features Class D efficiency, variable crossover, phase control, auto-on sensing, and versatile input options (RCA/LFE, Speaker Level, 12V Trigger).

For optimal performance and safety, please read this manual thoroughly before installation and use.

2. SAFETY INSTRUCTIONS

Please observe the following safety precautions to prevent damage to the unit and ensure user safety:

- **Electrical Safety:** Always disconnect the amplifier from the power outlet before performing any service or installation. Ensure proper grounding. Do not expose the amplifier to rain or moisture.
- **Ventilation:** The amplifier requires adequate ventilation. Do not block any ventilation openings. Install the amplifier in a location with sufficient airflow.
- **Placement:** Install the in-wall subwoofer and amplifier in locations free from excessive heat, humidity, dust, or vibration. Keep the amplifier away from direct sunlight and heat sources.
- **Wiring:** Ensure all wiring connections are secure and correct before powering on the system. Incorrect wiring can cause damage to the equipment.
- **Servicing:** Do not attempt to service this product yourself. Refer all servicing to qualified service personnel.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- OSD Audio IWS88 In-Wall Subwoofer
- OSD Audio SMP800 Class D Mono Amplifier
- Removable Grille for IWS88 Subwoofer
- Power Cable for SMP800 Amplifier
- Instruction Manual (this document)
- Mounting Hardware (integrated dog-ear clamps for subwoofer)

4. SETUP AND INSTALLATION

4.1 In-Wall Subwoofer Installation (IWS88)

1. **Choose Location:** Select a suitable wall location, ensuring no obstructions like electrical wiring, plumbing, or studs are present. Use a stud finder to locate studs and avoid them.
2. **Cut Opening:** Use the provided cutout template (if included, otherwise measure carefully) to mark the opening on the wall. Carefully cut the opening using a drywall saw.
3. **Run Speaker Wire:** Route appropriate gauge speaker wire (e.g., 14-gauge or 12-gauge) from the amplifier location to the subwoofer opening. Leave enough slack for connections.
4. **Connect Speaker Wire:** Connect the speaker wires to the spring-loaded terminals on the IWS88 subwoofer. Ensure correct polarity (+ to + and - to -).

Image: Front view of the IWS88 In-Wall Subwoofer with the grille removed, revealing the dual 8-inch drivers and the speaker wire terminals.
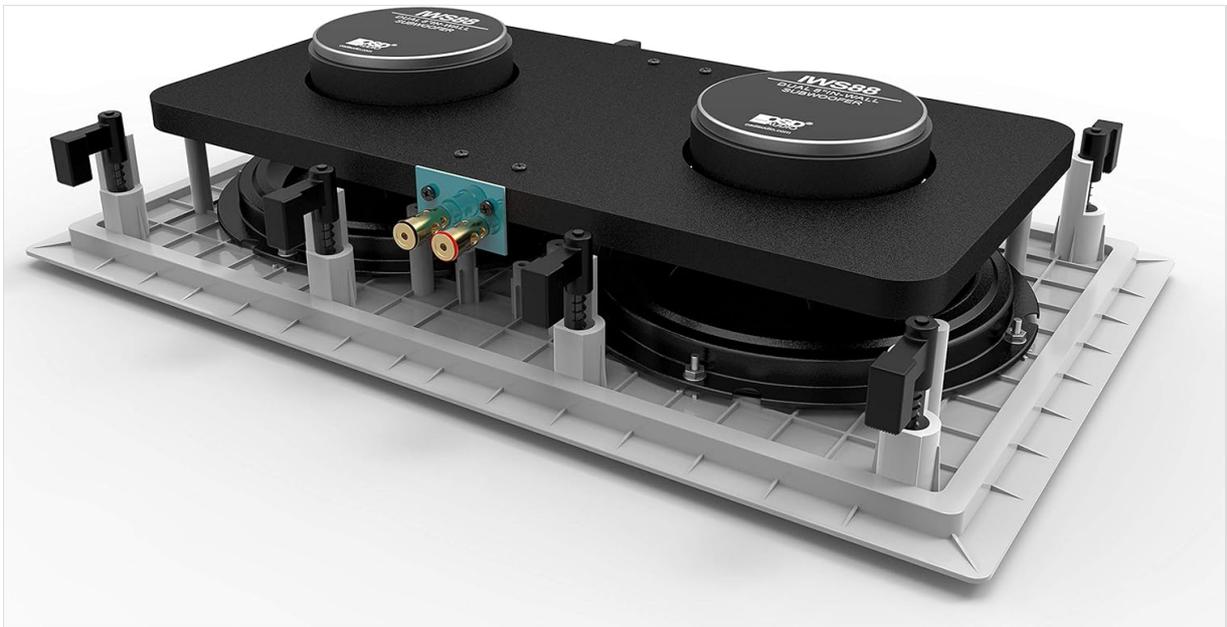
Image: Angled view of the IWS88 In-Wall Subwoofer, illustrating its internal components, mounting clamps, and speaker terminals.

5. **Mount Subwoofer:** Carefully insert the subwoofer into the wall opening. Tighten the mounting screws (usually located on the front baffle) which will engage the dog-ear clamps to secure the subwoofer to the drywall. Do not overtighten.

6. **Attach Grille:** Once the subwoofer is securely mounted, attach the magnetic grille to the front of the subwoofer.
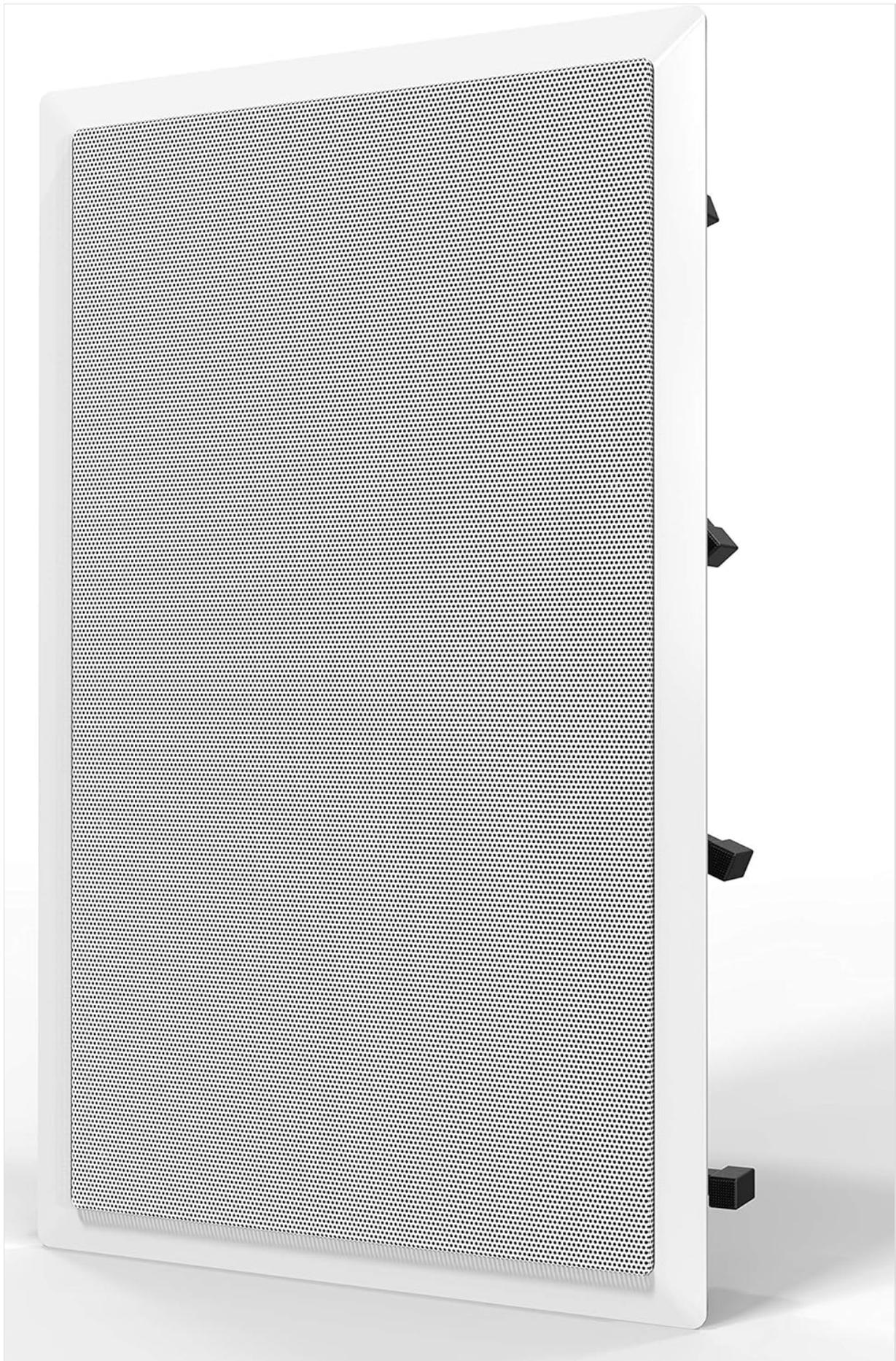
Image: Front view of the IWS88 In-Wall Subwoofer with the magnetic grille in place, demonstrating its flush and discreet appearance.

4.2 Amplifier Connection (SMP800)

Position the SMP800 amplifier in a well-ventilated area, preferably near your AV receiver or audio source.

Image: Rear panel of the SMP800 Class D Mono Amplifier, highlighting its input and output connections.

1. **Connect Audio Input:**
   - **RCA/LFE Input:** For most home theater receivers with a dedicated subwoofer output (LFE or Sub Out), connect an RCA cable from the receiver's subwoofer output to the SMP800's LFE input. If your receiver has stereo RCA outputs, use both L and R inputs on the SMP800.
   - **Speaker Level Input:** If your receiver does not have a dedicated subwoofer output, connect speaker wires from your receiver's main speaker outputs to the SMP800's Speaker Level Input terminals.

2. **Connect Subwoofer Output:** Connect the speaker wires from the IWS88 in-wall subwoofer to the SMP800's Subwoofer Speaker Output terminals. Ensure correct polarity (+ to + and - to -).

Image: Close-up of the SMP800 amplifier's subwoofer speaker output terminals.

Image: Close-up of the SMP800 amplifier's RCA/LFE inputs and speaker level inputs.

3. **12V Trigger (Optional):** If your AV receiver or control system has a 12V trigger output, connect it to the SMP800's 12V Trigger input. This allows the amplifier to power on/off automatically with your main system.

4. **Power Connection:** Connect the supplied power cable to the SMP800 amplifier and then to a suitable AC power outlet. Ensure the AC Voltage Selector switch on the amplifier is set to the correct voltage for your region (110-120V or 220-240V).

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

- **Manual Power:** Press the power button on the front panel of the SMP800 amplifier to turn it on or off.
- **Auto-On Sensing:** If the amplifier's 'MUSIC ON 12V' switch is set to 'MUSIC' and an audio signal is detected on the RCA/LFE or Speaker Level inputs, the amplifier will automatically power on. It will enter standby mode after a period of no audio signal.
- **12V Trigger:** If connected, the amplifier will power on and off in sync with your main system.

5.2 Adjusting Controls (SMP800)

The SMP800 amplifier features several controls to optimize subwoofer performance:

- **Volume/Gain:** Adjusts the overall output level of the subwoofer. Start with a low setting and gradually increase until the bass blends well with your main speakers.
- **Crossover Frequency:** This control determines the highest frequency the subwoofer will reproduce. Set it to blend seamlessly with your main speakers. A common starting point is 80Hz-100Hz, but adjust based on your main speakers' low-frequency capabilities.
- **Phase Control:** Adjusts the phase of the subwoofer output (0° or 180°). Experiment with both settings to find the one that provides the most impactful and coherent bass response in your listening position.

6. MAINTENANCE

To ensure the longevity and optimal performance of your OSD Audio subwoofer and amplifier, follow these simple maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the surfaces of the amplifier and subwoofer grille. Do not use liquid cleaners, aerosols, or abrasive chemicals, as they may damage the finish or internal components.
- **Ventilation:** Periodically check that the amplifier's ventilation openings are clear of dust and debris to prevent overheating.
- **Connections:** Occasionally check all cable connections to ensure they are secure. Loose connections can lead to signal loss or intermittent performance.
- **Environment:** Avoid exposing the amplifier to extreme temperatures or humidity.

7. TROUBLESHOOTING

If you encounter issues with your OSD Audio subwoofer and amplifier bundle, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
No sound from subwoofer	- Amplifier not powered on - Incorrect input selection - Loose audio cables - Incorrect speaker wiring - Volume too low - Crossover set too low	- Check power button and power outlet. - Ensure correct input is selected on amplifier/receiver. - Verify all RCA/LFE or speaker level connections. - Check subwoofer speaker wire connections for correct polarity. - Increase amplifier volume. - Adjust crossover frequency.
Distorted or unclear bass	- Volume too high - Incorrect phase setting - Subwoofer placement issues - Over-driven signal	- Reduce amplifier volume. - Toggle phase control (0°/180°) for best sound. - Experiment with subwoofer placement. - Check source signal for distortion.
Humming or buzzing sound	- Ground loop issue - Loose connections - Interference from other electronics	- Try plugging amplifier into a different outlet or using a ground loop isolator. - Check all audio and power connections. - Move amplifier away from other electronic devices.

Problem	Possible Cause	Solution
Amplifier not turning on automatically	'MUSIC ON 12V' switch set incorrectly - No audio signal detected 12V trigger not connected or active	- Ensure 'MUSIC ON 12V' switch is set to 'MUSIC'. - Verify audio signal is present at inputs. - Check 12V trigger connection and source.

If the problem persists after trying these solutions, please contact OSD Audio customer support.

8. SPECIFICATIONS

IWS88 In-Wall Subwoofer

- **Type:** Passive In-Wall Subwoofer
- **Drivers:** Dual 8-inch Woofers
- **Power Handling:** 350 Watts
- **Impedance:** 8 Ohms
- **Frequency Response:** Refer to product page for detailed specifications.
- **Dimensions:** Refer to product page for detailed dimensions and cutout size.

SMP800 Class D Mono Amplifier

- **Amplifier Type:** Class D Mono
- **Power Output:** 800 Watts (Max)
- **Inputs:** RCA/LFE, Speaker Level, 12V Trigger
- **Outputs:** Subwoofer Speaker Output
- **Controls:** Variable Crossover, Phase Control (0°/180°), Volume/Gain
- **Features:** Auto-On Sensing
- **AC Voltage:** Selectable (110-120V / 220-240V)
- **Dimensions:** Refer to product page for detailed dimensions.

9. WARRANTY AND SUPPORT

9.1 Warranty Information

OSD Audio products are designed and manufactured to the highest quality standards. This product is covered by a standard manufacturer's warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary. Please retain your proof of purchase for warranty claims.

The warranty does not cover damage caused by improper installation, accident, misuse, abuse, negligence, unauthorized modification, or normal wear and tear.

9.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please visit the official OSD Audio website or contact their customer support department. Contact information can typically be found on the OSD Audio website or on the product packaging.

Before contacting support, please have your product model numbers (IWS88 and SMP800) and a

description of the issue ready.