

Fenton 902.426 WK20

Fenton 902.426 WK20 8-inch Kevlar Woofer Instruction Manual

Model: 902.426 WK20 | Brand: Fenton

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the proper installation, operation, and maintenance of your Fenton 902.426 WK20 8-inch Kevlar Woofer. Designed for high-fidelity audio reproduction, this woofer features a durable Kevlar cone and robust rubber suspension, ensuring clear and powerful bass. It is suitable for integration into various audio systems, including home and car audio setups.

Key features include a 20 cm (8-inch) diameter, 250 Watts RMS power handling, 500 Watts maximum power, 8 ohms impedance, and a sensitivity of 85.5 dB. The frequency response ranges from 27 Hz to 6000 Hz.



Image 1.1: Front view of the Fenton 902.426 WK20 woofer, showcasing its yellow Kevlar cone and black rubber surround.

2. SETUP AND INSTALLATION

2.1 Installation Considerations

The Fenton 902.426 WK20 woofer has an impedance of 8 ohms, making it compatible with a wide range of home audio amplifiers. It can be installed as a single unit, in pairs, or as part of a multi-speaker array, depending on your audio system design.

2.2 Amplifier Recommendation

This woofer is designed to be amplified by a traditional 2-channel Class AB amplifier. For optimal performance and to achieve the best sound quality, it is recommended to provide approximately **250 watts RMS per channel**. To prevent potential damage to the speaker, it is crucial not to exceed the maximum recommended power ratings of 500 Watts.

2.3 Physical Dimensions and Mounting

Careful consideration of the woofer's dimensions is necessary for proper installation into an enclosure or mounting location. Refer to the diagram below for detailed measurements:

- **Total Diffuser Diameter:** 20.3 cm
- **Diagonal Installation Holes:** 19.5 cm
- **Installation Cutout Diameter:** 18.3 cm
- **Magnet Diameter:** 14 cm
- **Mounting Depth:** 8.8 cm
- **Product Dimensions (L x W x H):** 12 x 21 x 23 cm
- **Item Weight:** 2.8 kg

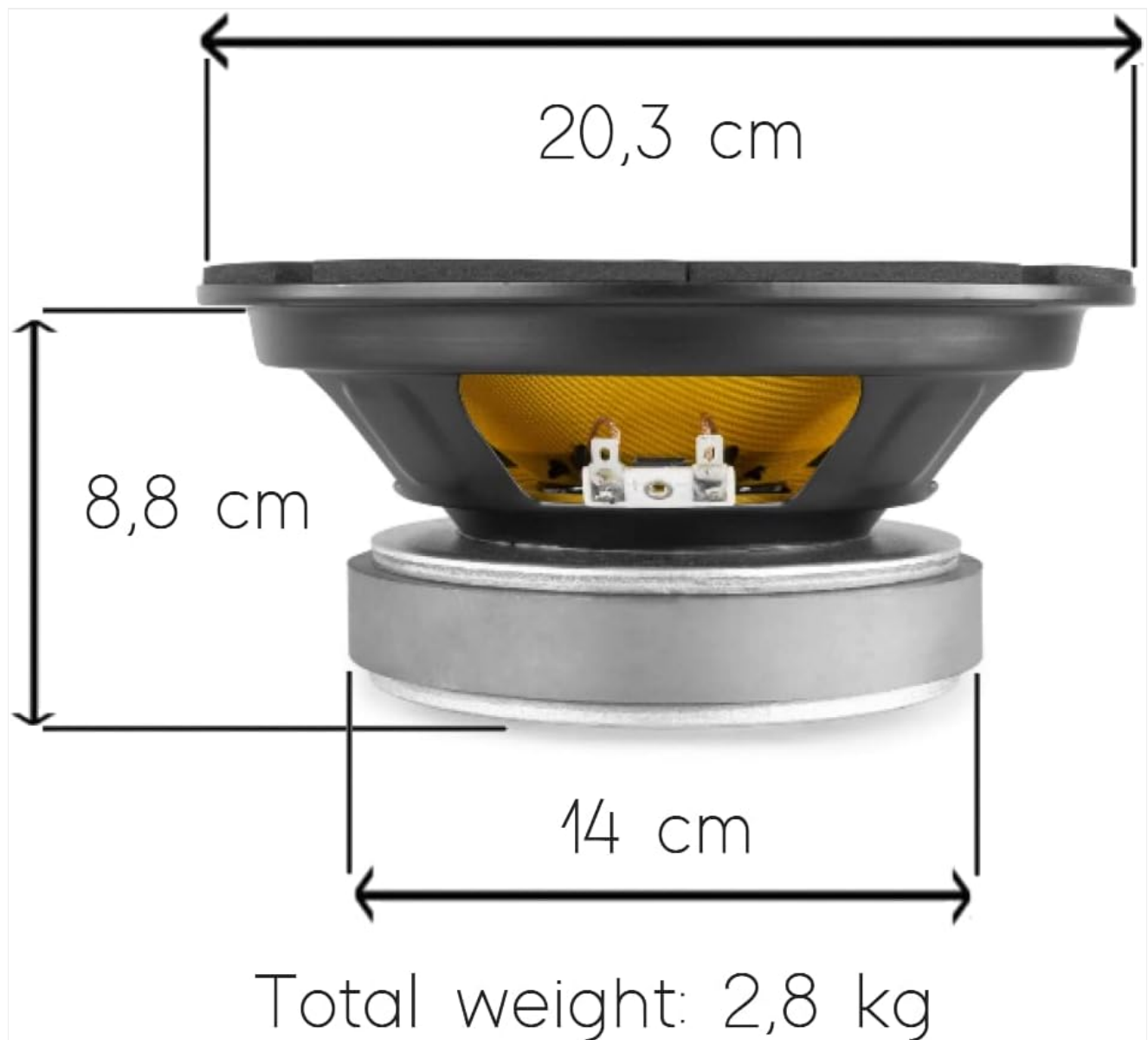


Image 2.1: Dimensional drawing of the woofer, indicating total diameter, mounting depth, and magnet diameter.

2.4 Wiring Connections

Connect the woofer to your amplifier using appropriate speaker wire. Ensure correct polarity (+ to + and - to -) to maintain

proper phase and sound quality. The woofer features standard terminals for secure connections.



Image 2.2: Rear view of the woofer, highlighting the connection terminals and the Fenton branding on the magnet.

3. OPERATING INSTRUCTIONS

After successful installation and connection to a compatible amplifier, follow these general operating guidelines:

1. **Initial Power-Up:** Before turning on your amplifier, ensure its volume control is set to the minimum level.
2. **Volume Adjustment:** Gradually increase the amplifier's volume to your desired listening level. Avoid sudden high volume increases.
3. **Avoid Overdriving:** Do not operate the woofer at excessively high volumes for extended periods, as this can lead to distortion and potential damage to the speaker components. If you hear any distortion, immediately reduce the volume.
4. **System Compatibility:** Ensure that your amplifier's output power and impedance match the woofer's specifications for optimal performance and longevity.

4. MAINTENANCE

Proper maintenance will help extend the lifespan and maintain the performance of your woofer:

- **Cleaning:** Regularly clean the woofer cone and surround with a soft, dry, lint-free cloth. Avoid using harsh chemicals or abrasive materials.

- **Environmental Protection:** Protect the woofer from direct sunlight, extreme temperatures, and high humidity. The woofer is **not waterproof**; avoid exposure to liquids.
- **Physical Handling:** Do not press on the speaker cone or suspension, as this can cause permanent damage.
- **Inspection:** Periodically inspect the speaker for any signs of wear or damage, especially to the cone and rubber surround.

5. TROUBLESHOOTING

If you encounter issues with your Fenton 902.426 WK20 woofer, refer to the following troubleshooting guide:

5.1 No Sound Output

- **Check Connections:** Ensure all speaker wires are securely connected to both the woofer and the amplifier, and that polarity is correct.
- **Amplifier Status:** Verify that your amplifier is powered on, functioning correctly, and receiving an audio signal from your source device.
- **Source Device:** Confirm that your audio source (e.g., stereo, car head unit) is playing and its volume is not muted or set too low.

5.2 Distorted or Unclear Sound

- **Volume Level:** Reduce the amplifier's volume. Distortion often occurs when the amplifier or woofer is overdriven.
- **Impedance Match:** Confirm that the amplifier's output impedance matches the woofer's 8-ohm impedance.
- **Physical Damage:** Visually inspect the woofer cone and rubber surround for any tears, punctures, or other physical damage.
- **Crossover Settings:** If using a crossover, ensure it is set appropriately for a woofer (typically low-pass filter).

5.3 Weak or Insufficient Bass

- **Amplifier Power:** Ensure your amplifier provides sufficient power (250 Watts RMS recommended) to drive the woofer effectively.
- **Enclosure:** Verify that the woofer is installed in a suitable enclosure (if applicable) that is properly sealed and sized for optimal bass response.
- **Phase:** Double-check speaker wire polarity. Incorrect polarity can lead to phase cancellation and reduced bass output.
- **Equalizer/Bass Boost:** Adjust any equalizer or bass boost settings on your amplifier or audio source.

6. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	Fenton
Model	902.426 WK20
Speaker Type	Woofer
Speaker Size	8 inches (20 cm)
Cone Material	Kevlar
Suspension Material	Rubber
RMS Power	250 Watts

Feature	Specification
Max Power	500 Watts
Impedance	8 ohms
Sensitivity	85.5 dB
Frequency Response	27 - 6000 Hz
Total Diffuser Diameter	20.3 cm
Diagonal Installation Holes	19.5 cm
Installation Cutout Diameter	18.3 cm
Magnet Diameter	14 cm
Mounting Depth	8.8 cm
Product Dimensions (L x W x H)	12 x 21 x 23 cm
Item Weight	2.8 kg
Connectivity Technology	Auxiliary, RCA
Waterproof	No









Image 6.1: Detailed view of the woofer's magnet, displaying model number, impedance, and power ratings.

7. WARRANTY AND SUPPORT

The Fenton 902.426 WK20 woofer comes with a **2-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use.

For warranty claims, technical assistance, or any product-related inquiries, please contact your original retailer or the manufacturer, GK SOUND, directly. Please retain your proof of purchase for warranty validation.

Related Documents - 902.426 WK20

 <p>AV360BT Amplifier USB/SD/BT Rev. 01-100-004</p> <p>INSTRUCTION MANUAL GEBRAUCHSANLEITUNG BEDIENUNGSANLEITUNG MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS ISTRUCCIA D'USO</p> <p>VI.2</p>	<p>Fenton AV360BT Amplifier USB/SD/BT Instruction Manual</p> <p>This manual provides comprehensive instructions for the Fenton AV360BT Amplifier, covering setup, operation, safety precautions, and features like USB, SD, and Bluetooth connectivity.</p>
 <p>FT10LED Portable System Rev. 01-170-001</p> <p>INSTRUCTION MANUAL GEBRAUCHSANLEITUNG BEDIENUNGSANLEITUNG MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS ISTRUCCIA D'USO</p> <p>VI.2</p>	<p>Fenton FT10LED Portable System Instruction Manual</p> <p>This manual provides instructions for the Fenton FT10LED Portable System, covering unpacking, power supply, controls, connections, and technical specifications. It includes safety precautions and warranty information.</p>
 <p>RP180 Series Record Player Vintage Rev. 01-100-000-000-000-000</p> <p>INSTRUCTION MANUAL GEBRAUCHSANLEITUNG BEDIENUNGSANLEITUNG MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS ISTRUCCIA D'USO</p> <p>VI.2</p>	<p>Fenton RP180 Series Record Player Vintage Instruction Manual</p> <p>Comprehensive instruction manual for the Fenton RP180 Series Vintage Record Player, covering setup, operation, and features including turntable, radio, Bluetooth, CD playback, and AUX input.</p>
 <p>AV340BT 5-Channel Surround Amplifier Rev. 01-100-000</p> <p>INSTRUCTION MANUAL GEBRAUCHSANLEITUNG BEDIENUNGSANLEITUNG MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS ISTRUCCIA D'USO</p> <p>VI.2</p>	<p>Fenton AV340BT 5-Channel Surround Amplifier Manual</p> <p>Instruction manual for the Fenton AV340BT 5-Channel Surround Amplifier, covering setup, operation, safety precautions, and technical specifications.</p>
 <p>RP162 Record Player HQ BT Rev. 01-100-000-000-000-000</p> <p>INSTRUCTION MANUAL GEBRAUCHSANLEITUNG BEDIENUNGSANLEITUNG MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS ISTRUCCIA D'USO</p> <p>VI.4</p>	<p>Fenton RP162 Record Player HQ BT Instruction Manual</p> <p>Comprehensive instruction manual for the Fenton RP162 Record Player HQ BT, detailing setup, operation, features like Bluetooth connectivity, USB playback/recording, and technical specifications. Learn how to use your Fenton record player safely and effectively.</p>
 <p>RP102 Series Record Player BT Rev. 01-100-000-000-000-000</p> <p>INSTRUCTION MANUAL GEBRAUCHSANLEITUNG BEDIENUNGSANLEITUNG MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS ISTRUCCIA D'USO</p> <p>VI.2</p>	<p>Fenton RP102 Series Record Player BT: User Manual and Operation Guide</p> <p>Comprehensive instruction manual for the Fenton RP102 Series Record Player BT. Learn about setup, operation, BT connectivity, computer connection, and software configuration. Includes safety precautions and technical specifications.</p>

