

MAG M27BS (Compatible with Omnitronic BD1380, CDV500, DD1220, DD1221, DD3120)

MAG M27BS Moving Magnet Cartridge with Diamond Stylus User Manual

For Omnitronic BD1380, CDV500, DD1220, DD1221, DD3120 Turntables

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your new MAG M27BS Moving Magnet Cartridge with Diamond Stylus. Designed for high-fidelity audio reproduction, this cartridge is compatible with various Omnitronic turntable models. Please read this manual thoroughly before installation to ensure proper setup and optimal performance.

2. PRODUCT OVERVIEW

The MAG M27BS is a high-quality moving magnet phono cartridge featuring a durable diamond stylus. It is engineered to deliver excellent sound clarity, strong tracking ability, and a wide frequency response, enhancing your vinyl listening experience.



Figure 1: The MAG M27BS Moving Magnet Cartridge, shown with its protective cover, mounting screws, and packaging.

3. SPECIFICATIONS

Type	Moving Magnet Cartridge with Diamond Stylus Needle
Model	M27BS
Output Voltage (at 1kHz, 5 cm/sec)	5.5 mV ± 3dB
Channel Balance (at 1kHz)	Below 1 dB
Channel Separation (at 1kHz)	More than 15 dB
Frequency Response	20 Hz ~ 20 kHz
Tracking Force	3.0g (Recommended range: 2.5 ~ 3.5g)
Stylus Tip	Stereo Spherical Diamond Tip

4. COMPATIBILITY

The MAG M27BS cartridge is designed to be compatible with the following Omnitronic turntable models:

- Omnitronic BD1380
- Omnitronic CDV500
- Omnitronic DD1220
- Omnitronic DD1221
- Omnitronic DD3120

If your turntable model is not listed, please consult your turntable's manual or contact support for compatibility verification.

5. INSTALLATION (SETUP)

Proper installation is crucial for optimal sound quality and to prevent damage to your records and stylus. If you are unsure about any step, please seek professional assistance.

1. **Preparation:** Ensure your turntable is powered off and unplugged. Remove any existing cartridge or stylus carefully. Place the turntable on a stable, level surface.
2. **Connect Wires:** Carefully connect the four color-coded wires from your tonearm to the corresponding pins on the back of the MAG M27BS cartridge. Use tweezers if necessary. The standard color code is:
 - Red (R+): Right Channel Hot
 - Green (R-): Right Channel Ground
 - White (L+): Left Channel Hot
 - Blue (L-): Left Channel Ground



Figure 2: Rear view of the MAG M27BS cartridge, illustrating the four connection pins for tonearm wires.

3. **Mount Cartridge:** Attach the cartridge to your turntable's headshell using the provided screws. Ensure the cartridge is securely fastened but do not overtighten.
4. **Alignment:** Proper cartridge alignment (overhang and azimuth) is critical. Use a protractor (often

included with turntables or available separately) to align the cartridge correctly within the headshell. This minimizes tracking error and distortion.

5. **Set Tracking Force:** Adjust your tonearm's counterweight to achieve the recommended tracking force of 3.0g. The acceptable range is 2.5g to 3.5g. Use a stylus force gauge for accuracy. Incorrect tracking force can cause skipping, excessive record wear, or poor sound.
6. **Set Anti-Skate:** Adjust the anti-skate setting on your tonearm. A good starting point is to match the anti-skate value to your tracking force. Fine-tune by ear for balanced sound across both channels.

6. OPERATION

Once installed and properly adjusted, the MAG M27BS cartridge operates as part of your turntable system. Ensure your turntable is correctly set up according to its own manual. Always lower the tonearm gently onto the record to prevent damage to the stylus and record grooves.

7. MAINTENANCE

- **Stylus Cleaning:** Regularly clean the stylus tip to remove dust and debris. Use a soft stylus brush, brushing gently from back to front (never side-to-side or front-to-back). Specialized stylus cleaning fluids can also be used sparingly.
- **Record Cleaning:** Keep your records clean. Dust and grime on records can transfer to the stylus, degrading sound quality and accelerating wear.
- **Stylus Inspection:** Periodically inspect the stylus for wear or damage. A worn stylus can damage your records and produce poor sound. Replace the stylus if it appears bent, chipped, or excessively worn.
- **Cartridge Protection:** When not in use, ensure the stylus guard is in place to protect the delicate diamond tip.

8. TROUBLESHOOTING

- **No Sound or Weak Sound:**
 - Check all wire connections between the cartridge and tonearm for proper contact and correct color coding.
 - Ensure the turntable is connected to the correct phono input on your amplifier/receiver.
 - Verify that your amplifier/receiver is set to the phono input.
- **Distorted Sound:**
 - Re-check tracking force and anti-skate settings.
 - Clean the stylus tip.
 - Verify cartridge alignment.
 - Inspect the stylus for damage or wear.
- **Skipping:**
 - Increase tracking force slightly within the recommended range (up to 3.5g).
 - Check anti-skate setting.
 - Ensure the turntable is on a stable, level surface, free from vibrations.
 - Inspect records for dust, debris, or damage.
- **Humming or Buzzing:**

- Ensure the turntable's ground wire is properly connected to your amplifier/receiver.
- Check for loose connections in the cartridge wiring.
- Move the turntable away from other electronic devices that may cause interference.

9. WARRANTY AND SUPPORT

Your MAG M27BS cartridge comes with a **6-month warranty** against manufacturing defects. Additionally, a **14-day 'any reason' return policy** is offered from the date of purchase. Please retain your proof of purchase for warranty claims.

For technical assistance, compatibility questions, or warranty inquiries, please contact your retailer or the MAG customer support team. Providing your product model (M27BS) and a detailed description of the issue will help expedite support.