

OVERVIEW

The Intellitron MAG-1050 provides an easy, non-permanent grounding solution for HF antennas. It attaches magnetically to a vehicle's metal surface, enabling capacitive coupling for grounding without direct electrical contact.

KEY FEATURES

- **No Hardwired Grounding Required:** Provides grounding via capacitive coupling when placed on a vehicle's body.
- **Wide Frequency Support:** Works in the 7~30MHz range (7~50MHz if the connection cable is under 20cm or 7.87 inches).
- **Extended Grounding with Two Units:** Using two units allows operation in the 3–5MHz range.
- **Magnetic Attachment:** Easy to install and remove without damaging the vehicle.
- **Compact and Secure:** Measures 80 x 195mm (3.15 x 7.68 inches) and stays in place at speeds up to 110 km/h (68.35 mph).

INSTALLATION INSTRUCTIONS

Preparation

1. **Clean the installation area** on the vehicle's metal surface—remove dirt, oil, and dust.
2. **Choose a flat or slightly curved surface** for better adhesion.

Mounting the MAG-1050

1. Remove the M16 nut securing the cable connector on your base.
2. Insert the MAG-1050 connection cable terminals into the connector.
3. Reattach and tighten the M16 nut to secure the connection.
4. For 50MHz operation, keep the connection cable under 20cm (7.87 inches) (longer cables may degrade SWR and tuning).

Tuning & Performance Optimization

- After installation, transmit at low power and check SWR.
- If SWR is high, adjust the mounting position or reroute cables.
- Avoid bundling coaxial and connection cables, as this can negatively impact SWR.

TECHNICAL SPECIFICATIONS

- **Frequency Range:** 7–50MHz
 - 3.5MHz operation possible with two units
- **Power Handling:** 500W (SSB), 200W (FM/CW)
- **Temperature Resistance:** -20°C to 90°C (-4°F to 194°F)
- **Adhesion Strength:** Stable up to 110 km/h (68.35 mph)
- **Dimensions:** 80 x 195mm (3.15 x 7.68 inches)
- **Cable Length:** ~30cm (~11.81 inches)
- **Weight:** ~55g (~1.94 oz) (including cables and terminals)
- **Material:** Adhesive resin magnet with copper sheet

Important Usage Notes

- **Surface damage risk:** Prolonged use may cause paint discoloration or fading due to sun exposure.
- **Ensure a clean, dry surface:** Dirt or moisture can weaken adhesion, increasing the risk of detachment.
- **Avoid placing on seams (e.g., doors, trunk edges):** Reduces suction and may cause peeling.
- **Do not remove by pulling the cable:** Always grip the plate when detaching.
- **Only works on metal surfaces:** Does not adhere to glass, aluminum, or fiberglass.
- **For long-term use, periodically check adhesion** to prevent accidental detachment.



TWO YEAR LIMITED WARRANTY

This Limited Product Warranty is provided by the Dealer where your Intellitron product was purchased. The Product Warranty extends only to the original purchaser of the product and is valid for a period of two years from the date of purchase. Please keep your dated sales receipt as evidence of the date of purchase. You will need it to receive warranty service. Your Dealer warrants the product will be free from defects in workmanship and materials under normal use. If the product fails to conform to the warrant and is within the warranty period of two years, contact your original dealer for a return authorization. Your dealer may choose to either repair or replace the non-conforming product.