

# GRA-7350T (C)

Operation Instructions for the GRA-RPG Antenna

This antenna is designed for amateur radio use. Only transmit on the specified frequencies to ensure compliance and safety.

**Transmission and Equipment Safety:** Avoid transmitting continuously at a high VSWR (Voltage Standing Wave Ratio), as this may damage your radio equipment. If you detect an unusually high VSWR, stop transmitting immediately and seek assistance from your dealer.

**Regular Maintenance:** Due to movement and handling during portable operations, components such as nuts and screws may loosen. Regularly check these fasteners and tighten them as needed to ensure safe and reliable operation.

**Outdoor Operation Precautions:** Be mindful of potential damage from strong impacts or environmental factors, which can break the antenna and cause accidents if it falls. Exercise caution, especially when setting up near obstacles such as tree branches or other park structures. Ensure that the antenna is securely mounted to avoid any unexpected movement.

**Safety During Transmission:** Touching the antenna while it is transmitting can be dangerous. Make sure no one is near the antenna during transmission, particularly in a public park or crowded area.

**Installation Guidelines:** Use a robust and stable mounting system for the antenna. Choose a location that minimizes the risk of damage or interference with others in case the antenna is knocked over or falls. Ensure the antenna is installed securely and is not in an easily accessible area to prevent accidental contact.

**Antenna Performance and Safety Precautions:** Before using the antenna, confirm that its performance is satisfactory. Poor performance can damage the transceiver. Avoid touching the antenna and coaxial cable during thunderstorms to prevent electrocution from lightning.

**Cable Management and Driving Safety:** Route the coaxial cable in a manner that does not create a tripping hazard or interfere with other equipment. Avoid placing the antenna, antenna bracket, or coaxial cable near other electrical devices to prevent fire hazards or electrocution. Adjusting the frequency should be done cautiously and only when the equipment is stationary.



## NOTES FOR USING THE ANTENNA

To ensure optimal performance and maintain the best communication quality with the GRA-7350T(C) antenna, please consider the following guidelines:

This antenna is a portable multi-band HF model, ideally suited for stationary use. We recommend pairing it with the GRA-ULT01 Antenna Tripod for stable and efficient operation. Additionally, the use of a Ground Radial or Magnetic Grounding system (GRA-MAT50, using 1 plate for 7~30 MHz and 2 plates for 3.5 MHz) is advised to enhance its performance and ensure effective grounding.

When using the antenna in a portable setup, ensure it is properly grounded to the environment or with a suitable grounding system to reduce the Standing Wave Ratio (SWR). Avoid setting up the antenna close to other antennas or large metal objects, as this may adversely affect the VSWR. The GRA-7350T(C) is a substantial antenna, so select a sturdy and stable mounting point. If adequate grounding is challenging, consider using the GRA-MAT50 grounding system, Gabil's loaded coil radials, or other custom-built ground radials.

Remember, these guidelines are tailored to maximize the efficiency and safety of your GRA-7350T(C) antenna. For any further queries or assistance, please feel free to contact us.

### • Adjustment Method

To adjust for each frequency band, refer to the diagram on the down and move the coil up or down to the target position.

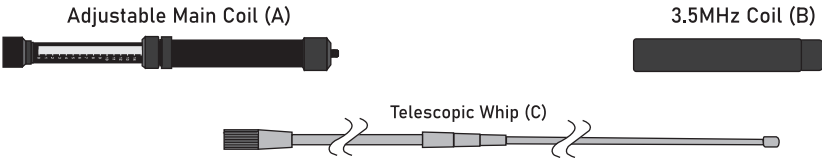
### • Frequency Band Adjustment Method

1. To operate on the 3.5MHz frequency band, add the 3.5MHz coil set. Connect the main coil (A), the 3.5MHz additional coil (B), and the telescopic whip (C) in sequence from bottom to top. For all other frequency bands, you may remove coil (B).

Note: Only install coil (B) when using the 3.5~3.8MHz frequency range. Do not install coil (B) for other frequencies.

2. Loosen the hand-screw of coil (A), slide the coil, and refer to the frequency and scale chart on the second page. Observe the SWRmeter while matching the resonance point (optimal SWR point).

· Maximum Size of GRA-7350T(C): The total length of coil (A) extended to its maximum, plus coils (B) and(C), is approximately 320.5 cm / 126.18 inches.



Frq.(MHz)	Adjustable Coil (A)	Telescopic Whip(C)	Remarks
3.34	17.5	Extend all sections of the telescopic whip	(A)+(B)+(C)
3.5	12.7	Extend all sections of the telescopic whip	(A)+(B)+(C)
4	0	Extend all sections of the telescopic whip	(A)+(B)+(C)
7	18	Extend all sections of the telescopic whip	(A)+(C)
10	8.7	Extend all sections of the telescopic whip	(A)+(C)
14	5	Extend all sections of the telescopic whip	(A)+(C)
18	3	Extend all sections of the telescopic whip	(A)+(C)
21	1.9	Extend all sections of the telescopic whip	(A)+(C)
24	1.2	Extend all sections of the telescopic whip	(A)+(C)
28	1.1	Extend all sections of the telescopic whip	(A)+(C)
30	1	Extend all sections of the telescopic whip	(A)+(C)
34.9	0	Extend all sections of the telescopic whip	(A)+(C)
36.3	0	Retract 1 sections of the telescopic whip from the top.	(A)+(C)
38.8	0	Retract 2 sections of the telescopic whip from the top.	(A)+(C)
42.9	0	Retract 3 sections of the telescopic whip from the top.	(A)+(C)
47.1	0	Retract 4 sections of the telescopic whip from the top.	(A)+(C)
52.05	0	Retract 5 sections of the telescopic whip from the top.	(A)+(C)

### •Specifications

Frequency:3.5/7~30/50MHz Band

Max. Power rating:130W (SSB)

Impedance:50Ω

Length:approx.2.6m (Max)

Weight:336g

Connector: UHF/ 3/8"x24

Type:1/4 wave reduced type (HF Band),

1/4 wave (50MHz)