



V-DIPOLE ANTENNA P/N ANTVD-1300



SPECIFICATIONS

Frequency:	1240-1320 MHz
Gain:	~2 dBi
Max Power:	10 Watts
Impedance:	50 Ohms
Polarizaton:	Linear
Connector:	SMA male plug
Coax Cable:	10-Inches long, with BALUN
Size/Weight:	3.4-inches / 13 grams
Typical Application:	Wireless A/V hobby transmitter / general ham radio

INTRODUCTION

The ANTVD-1300 antenna is ideal for robotic and R/C models that use 1.2GHz / 1.3GHz A/V transmitters. Each antenna is carefully center-tuned and can be used with 1240MHz through 1320MHz frequencies.

It is a compact design that is half the weight of many popular rubber ducky dipoles. So it is perfect for lightweight installations. The integrated coax feedline allows remote mounting of the antenna; This useful feature helps to move the RF signal further away from nearby sensitive electronics.

INSTALLATION

The antenna is designed to be mounted vertically on your hobby robot or R/C model. The provided mounting post is not needed if the installation area uses Styrofoam or wood construction. However, if there are nearby metallic or composite materials then the optional mounting post should be used.

The antenna has two arrow symbols printed on both sides of its circular body. The horizontal pointing arrow should face toward the front direction. The vertical pointing arrow is the RF polarization reference and it should point up (toward sky) or down (toward earth).

Examples of some R/C model aircraft installations are shown below:



TIPS AND HINTS

1. Do not paint the antenna. Surface coatings can affect performance.
2. For common robotic and R/C model applications the antenna must be installed vertically (pointing up or down); Do not use horizontal orientation. The receiver's antenna should also use vertical orientation to ensure matching RF polarization.
3. Do not install the antenna close to wiring, electronic components, or other metallic objects. It is best to keep the antenna's elements far away from the coax cable too.
4. Use nonmetallic hardware to mount the antenna to your robot or model. Nylon screws, double-sided foam tape, and household adhesives can be used.
5. Mount the antenna in an open area position that will maximize RF performance. For ground applications the antenna should be mounted above the robot or R/C vehicle. For airborne models that are made of wood or foam, the antenna can be installed above or below these materials. If composite or metallic materials are used in the airborne model then the antenna should be under the bottom side to minimize RF signal masking to the ground station.
6. There are no expected performance advantages with using a V-Dipole on a base station's video receiver. Instead, we recommend using our #ANTHWD-1200 dipole antenna. For better receiver performance the #RE1208P-SM patch antenna is a very popular choice.