

MODEL 8052 AMPTELLA™ LONG-RANGE ANTENNA

8052-080
318 MHz

8052-081
418 MHz

DoorKing's model 8052 Amplified Long-Range Antenna, the "Amptenna™", surpasses the performance of simple passive type antennas. The body of the Amptenna™ contains an amplifier which boosts received signals 18 dB (about 6 times). In addition to its amplification factor, a filter circuit reduces interference that may cause a decrease in the range of the antenna / receiver combination. The Amptenna™ is ideally used with DoorKing receivers, but can be used with any receiving device that operates on 318 MHz (P/N 8052-080) or 418 MHz (P/N 8052-081). Make sure to use the correct frequency model Amptenna™ since they have a very narrow operating frequency range.

Installation

It is possible to mount the Amptenna™ greater than 20 feet from the receiver. However, coax cable loses approximately 5 dB of gain for every 100 feet of length. At 300 feet, the gain of the "Amptenna™" is lost in the cable. The coax type cable used with the Amptenna™ and DoorKing RF receivers is RG59U. This is the same coax cable used in television antenna and cable TV wiring. Cable, connectors, and tools for this type cable are readily available from electronic supply stores. Poor range with a radio control is sometimes caused by interference on the specific operating frequency of the system. Interference can block the receiver's ability to decode the "good" signal from the transmitter. The filter in the Amptenna™ blocks out undesired interference encountered that is **not exactly** on the receiver's operating frequency of 318 or 418 MHz. Any 318 or 418 MHz interference encountered is **NOT** filtered out by the Amptenna™, so no increased range will be noticed while this specific interference remains when using the Amptenna™.

1. For best performance, install the Amptenna™ as high as possible in free air. The amplifier works best when it is in the line of sight of the transmitter and is kept clear of metal fencing or walls containing metal beams or reinforcements.
2. The Amptenna™ is powered with 12-24 volt AC or DC power, (not supplied). The unit draws 5 ma.
3. Connect the coax cable to the antenna input on the RF receiver. Approximately 18 feet of coax cable is supplied and performs best with this length or less for the installation.

"F" Connector Installation

1. Strip off the black outer insulation of the RG59U coax cable 1/2 inch. Cut off all of the braided shield wire leaving only the white center conductor.



2. Strip the white center insulation 1/4 inch leaving the center copper conductor exposed. Be careful not to nick the center conductor.



3. Slide the crimp ring over the cable.



4. Push the F connector onto the cable so that the serrated barrel of the connector slides between the white center insulation and the black outer insulation. Push it all the way on until the serrations are not visible and the black insulation is touching the shoulder of the F connector.



5. Slide the crimp ring near the F connector and crimp it using a pair of pliers.

