



Installation Instructions for 8058-080 and 8058-081 Amplified Long Range Antenna

DoorKing's model 8058 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 18db (about 6 times). In addition to its amplification factor, a filter circuit reduces interference that may decrease 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 (8058-080) or 418 (8058-081) MHz.

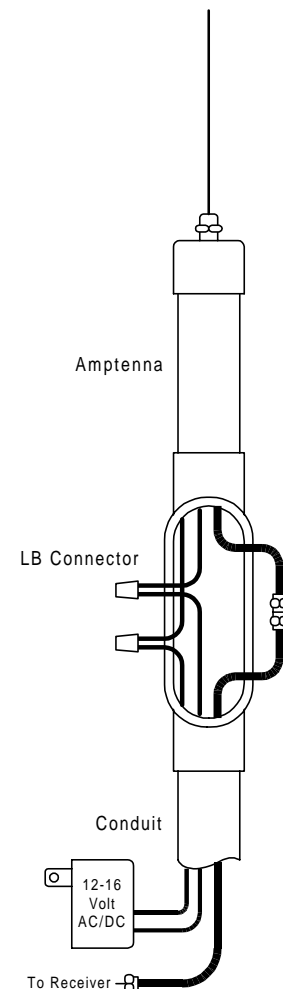
It is possible to mount the Amptenna™ greater than 20 feet from the receiver. However, coax cable loses 5db of gain for every 100 feet of length. At 300 feet, the gain of the Amptenna™ is lost in the cable. The coax cable used with the Amptenna™ and DoorKing receivers is RG59U. This is the same coax 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 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 that is not exactly on the operating frequency (318 or 418 MHz). However, any interference on 318 or 418 MHz is not be filtered out by the Amptenna™, and therefore no increase in range will be noticed.

INSTALLATION

The Amptenna™ is designed to be mounted using an LB type conduit fitting or watertight single gang junction box that will accept 1/2 inch threaded conduit. The Amptenna™ is threaded on one end and will screw directly into the LB or junction box, simplifying installation.

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™ must be powered with 12-16 volt AC or DC power. The unit draws 250 ma. **Caution: do not power the amplifier with 24 volts.**
3. Connect the coax cable to the antenna input on the receiver.



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.

