

# ASQ-2

Two Meter Squalo

## INSTRUCTION MANUAL



CAUTION: Read All Instructions Before Operating Equipment

**Cushcraft**  
Amateur Radio Antennas

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## **GENERAL DESCRIPTION**

The Cushcraft ASQ2 is a horizontally polarized antenna for fixed and mobile 2-Meter operation on SSB, CW, and legacy AM. The omni-directional pattern is also well suited for DX beacons and spotting.

## **Choosing a location**

For best performance on receiving and transmitting, mount the antenna in a clear location above or away from buildings, towers, feedlines, utility wires, and other antennas. While your own ingenuity and particular circumstances will determine the final mounting method, we'll pass along a few ideas for both permanent installation and portable operation.

**Never** mount this antenna in a location that will permit unsuspecting people to come in contact with the antenna elements.

**Never** mount this antenna where a mechanical failure might allow the antenna to contact power lines or other utility wires.

**Always** ground the feedline at the point where it enters a building to a good earth ground for lightning protection.

**WARNING** Always mount this antenna so that it is out of reach of adults and children. The elements can cause injury and/or severe RF burns.

## **Permanent Installation**

The ideal installation is a rigid pole or roof mount that puts the antenna completely in the clear. If the ideal installation is not possible, choose the best compromise. TV mast, heavy-duty rigid electrical conduit, and steel water pipes are suitable mast materials. The use of soft or thin wall mast is not recommended.

## **Portable Operation**

The ASQ2 may be used for portable or mobile operation. The light weight and small size allows it to be installed almost anywhere. Keep in mind that metal objects close to the antenna will affect tuning and radiation patterns.

# **WARNING**

***WHEN INSTALLING YOUR SYSTEM, TAKE EXTREME CARE TO AVOID ANY ACCIDENTAL CONTACT WITH POWER LINES OR OVERHEAD OBSTRUCTIONS. FAILURE TO EXERCISE THIS CARE COULD RESULT IN SERIOUS OR FATAL INJURY***

## **SWR Check**

Resonance can be checked with an MFJ-256 or MFJ-269. Alternately a transceiver and SWR meter can be used. Resonance may be changed by adjusting the diameter of the loop. If the resonance point is too low, make the loop smaller. If the resonance point is too high, make the loop larger. Remember that nearby objects including yourself can affect the tuning of the antenna.

## **ANTENNA MOUNTING**

Use the 1-3/4 u-bolt supplied to mount the ASQ2 to any mast up to 1-3/4 diameter. The ASQ2 is very light and should easily mount on any portable or permanent mast. No matter how secure you think the antenna is, NEVER mount it in a location where it could fall into or come in contact with power lines.



## **Grounding Considerations**

Although this antenna is designed to operate efficiently without the requirement of an earth ground, safety grounding must still be provided to protect equipment, property and persons from the hazards of lightning strikes and other weather related electrical discharges. In addition, the coaxial cable feeding the antenna should have the shield grounded to eliminate the risk of any indoor equipment failure allowing hazardous voltages that could create a shock hazard. Adequate protection can be accomplished by grounding the shield of the coax to a good earth ground where it enters the building, or directly burying the cable in the earth for several feet before it enters the building. For maximum lightning protection, the coaxial cable should be totally disconnected from the station during threatening weather conditions.



## **LIMITED WARRANTY**

Cushcraft Amateur Radio Antennas, 308 Industrial Park Rd., Starkville, MS 39759, warrants to the original consumer purchaser for one year from date of purchase that each Cushcraft antenna is free of defects in materials or workmanship. If, in the judgment of Cushcraft, any such antenna is defective, then Cushcraft Amateur Radio Antennas will, at its option, repair or replace the antenna at its expense within thirty days of the date the antenna is returned (at purchasers expense) to Cushcraft or one of its authorized representatives. This warranty is in lieu of all other expressed warranties, any implied warranty is limited in duration to one year. Cushcraft Amateur Radio Antennas shall not be liable for any incidental or consequential damages that may result from a defect. Some states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. This warranty does not extend to any products that have been subject to misuse, neglect, accident or improper installation. Any repairs or alterations outside of the Cushcraft factory will nullify this warranty.

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