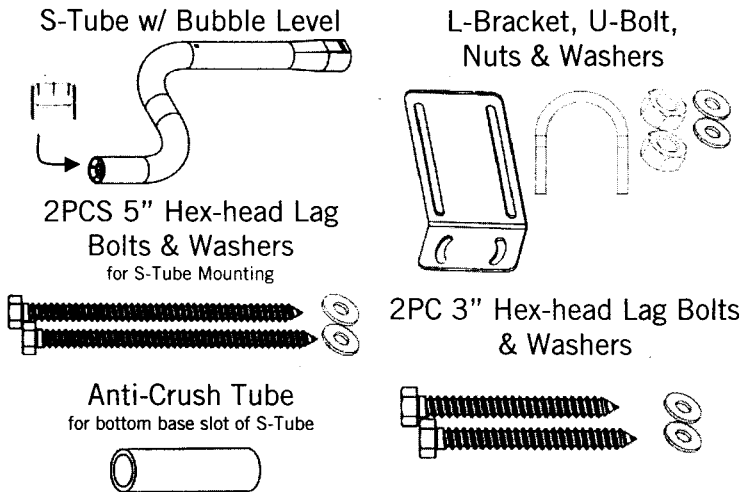


DIRECTV® S-Tube Mast Installation Manual

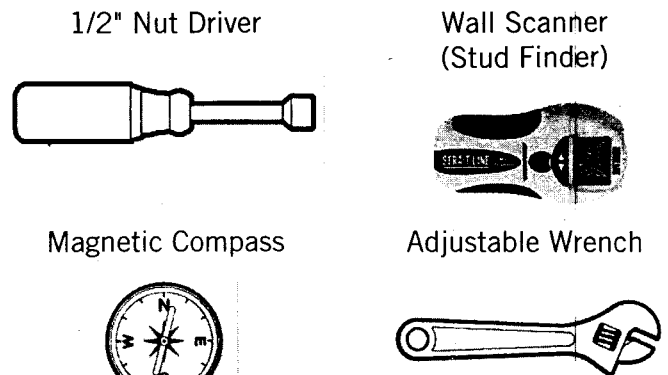
Introduction

The S-Tube antenna mast is designed for the installation of the DIRECTV Ka/Ku Multi-Satellite Dish antenna to the corner of a house or its chimney. If the installation location is anything other than previously mentioned, please use the EZALIGN mast (available separately).

Contents of Package



Tools Required



STEP 1 Finding Suitable Mounting Site

A suitable antenna site requires an unobstructed view of the southern sky, a stable antenna mounting surface, a distance of 100-ft or less for RG 6 cable from the antenna to the receiver, and grounding nearby.

NOTE: It is important to estimate the cable length at this point, as well as find a stable and reliable mounting location for the mast.

As previously mentioned, the recommended location for this mast is the corner of a house or chimney. Use a wall scanner (not included) to identify the wooden stud, or use other methods to determine a stable mounting surface.

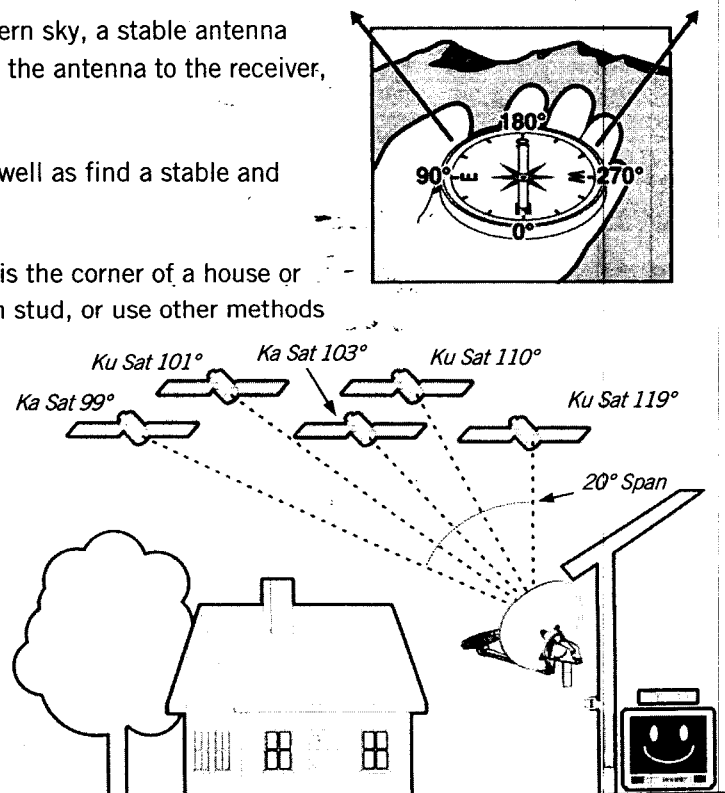
It is also very important to account for the amount of space needed to eventually mount the antenna over the mast, and not interfere with any overhead obstruction, such as the awning of a house. Allow at least 4 feet distance between the center hole of the S-tube and the overhead impediment.

The DIRECTV satellites are located in the southern sky above the Equator. The location for the antenna must have elevation-angle clearance (above the horizon) and a 20° span clearance (from 99° to 119°) for an unobstructed view to all five satellite locations. Northern border states have elevation readings toward 30° and southern border states have elevation readings toward 60°.

Continued on back

If you are on the West Coast, the satellites will be to the south-southeast.

If you are on the East Coast, the satellites will be to the southwest.



No trees, leaves, buildings can be in the line-of-sight between antenna and satellites.

STEP 1 Finding Suitable Mounting Site (cont.)

Use a magnetic compass to identify the direction of the satellites based on your location (see picture on front). If you are on the west coast, mount the mast to the corner closest to the south-southeast. If you are on the east coast, mount the mast to the corner closest to the southwest.

It is time to install the S-tube antenna mast at the location chosen in the previous step, and align it to be plumb (perfectly straight up). Plumbing the mast is critical for the antenna to receive optimal signals.

STEP 2 Mount the Mast

NOTE: At this point, it is imperative to confirm the location of the mounting surface. It is very important to mount the L-bracket, as well as the S-tube to a suitable location that can support the weight of the mast and the antenna. Pre-drilling the holes for the lag bolts is highly recommended. Remember, do not tighten any lag bolts or nuts, until the mast is plumb.

- While holding the S-tube against the mounting surface with your hand, insert and fasten the center 5" hex-head lag bolt (Diagram 1). As previously mentioned, be sure to leave at least 4 feet distance between the center hole of the S-tube and the overhead obstruction. Position the S-tube upright, ensure anti-crush tube is inserted then insert and fasten the other 5" lag bolt to the center of the base slot. (Diagram 2).
- With the U-bolt loosely attached to the L-bracket, slide the U-bolt over the S-tube, and mount the L-bracket to the adjacent wall (Diagrams 3 & 4) with included 3" hex-head lag bolts (2). The L-bracket must be movable horizontally, so do not tighten the lag bolts all the way. The S-mast is now ready for alignment.

STEP 3 Align the Mast

- With all the bolts slightly tightened, it is time to plumb the mast. A bubble level is located on the top of the mast to assist in alignment.
- Looking straight down at the bubble level, move the mast until the bubble is centered as shown (Diagrams 5 & 6). When the bubble level is centered, the mast is plumb. If you cannot center the bubble level, loosen the 3" lag bolts and/or the 5" lag bolt in the bottom base slot ever slightly to allow more movement.

STEP 4 Tighten Mast Bolts

When the mast is plumb, and while still keeping hold of the mast, tighten all the lag bolts and nuts, and carefully make sure they are secure. You may want to tighten further with an adjustable wrench. The S-tube mast is now ready for antenna installation.

Ensure Bubble Level in secured - see Diagram 5 for details

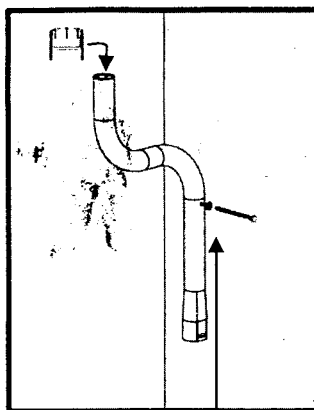


Diagram 1 Use 5" Hex-Head Lag Bolt

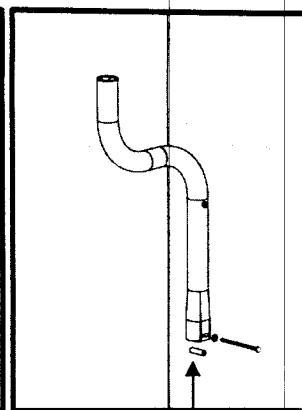


Diagram 2 Insert Anti-crush Tube

U-bolt with Nuts & Washers

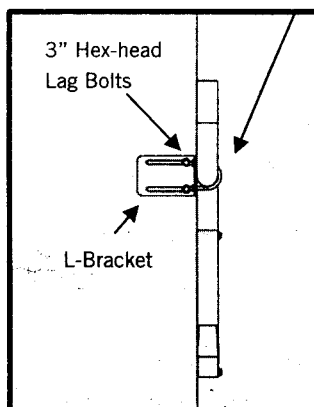


Diagram 3

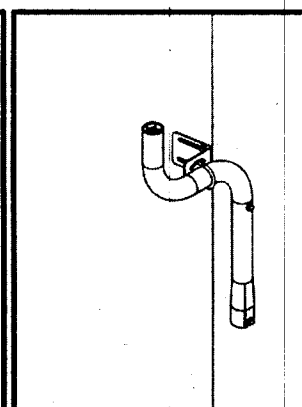


Diagram 4

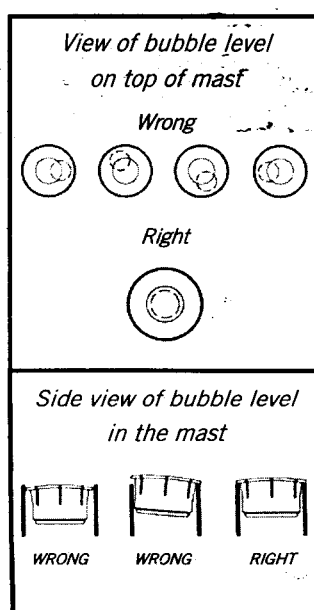


Diagram 5

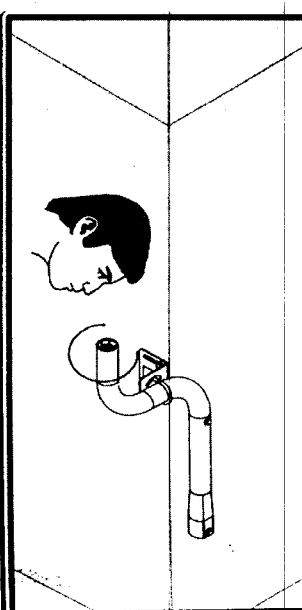


Diagram 6