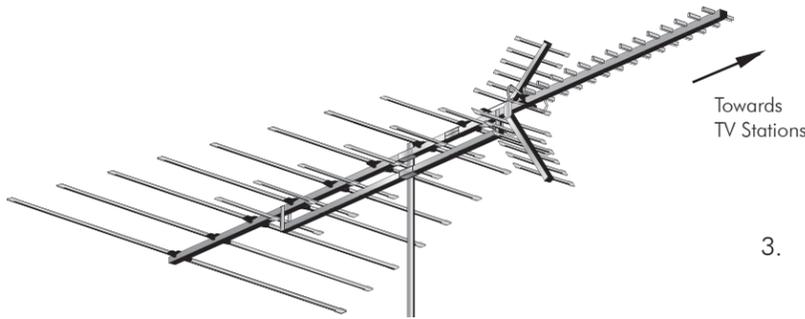




Outdoor HDTV Antenna for VHF/UHF/FM
Model C490

WARNING: Installation of this product near powerlines is dangerous. For your safety, follow the installation directions.

When you install your antenna, use extreme caution. If the antenna starts to fall, let it go! It could contact overhead power lines. If the antenna touches the power line, contact with the antenna, mast, cable or guy wires can cause electrocution and death. Call the power company to remove the antenna. Do not attempt to remove it yourself.



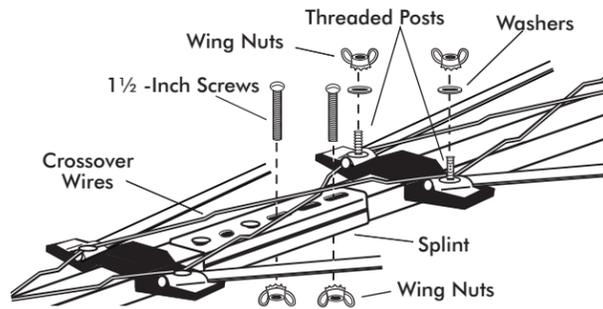
Before You Begin

Before beginning installation, read these directions and the **Consumer Product Safety Commission Information**. For your safety and convenience, plan each step of the installation and purchase the necessary hardware in advance. The hardware required and the order in which you perform the steps depend on the mounting and connection method you choose.

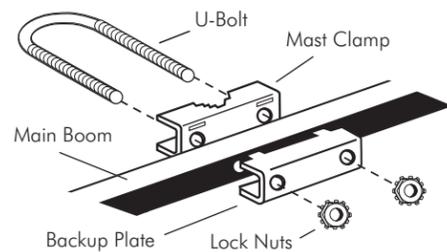
Step 1 ■ Assembling the Antenna

Assemble the entire antenna on the ground.

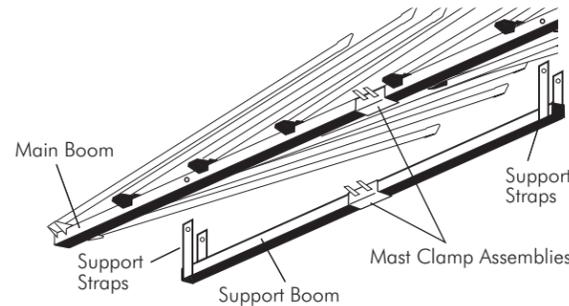
1. Use the supplied hardware to assemble the three main boom sections, as shown. If necessary, lift one end of the main boom so the crossover wires reach the threaded posts.



2. Use the supplied hardware to loosely attach one of the supplied mast clamp assemblies to the main boom, as shown. Move the antenna's elements out of the way as needed to access the mast clamp holes.

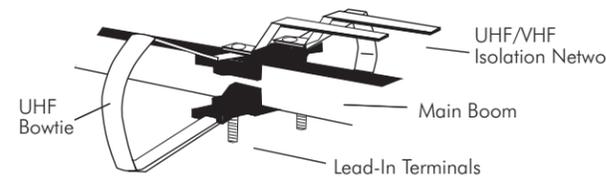


3. Attach the other mast clamp assembly to the support boom. (Be sure it faces the same direction as the main boom's mast clamp assembly). Fold out the two sets of metal support straps on the support boom and attach them to the corresponding holes on the main boom using the two supplied 1 1/2-inch screws and wing nuts.



4. Press the supplied large end plugs into the main boom and the support boom.
5. Pull both UHF bowties away from the main boom until they lock into place. Then slide each of the bowtie's unattached ends over the antenna's lead-in terminals labeled **CONNECT LEAD-IN HERE** (one for each half of the bowtie on each side of the boom).

Note: Both sections of the UHF/VHF isolation network should remain parallel to the main boom.



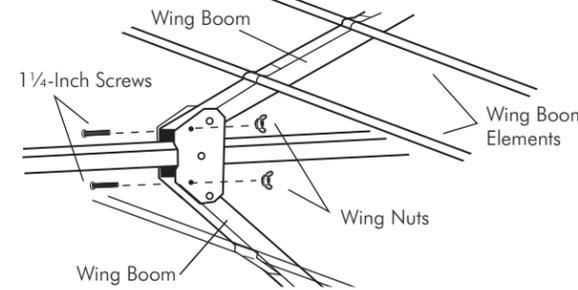
Step 2 ■ Unfolding the Elements

1. Hold the main boom's elements near the pivot points and pull them away from the boom until they snap into the support insulators.

Caution: To avoid damage to the elements, do not pull them near their outer ends. Once the elements are locked into position, do not attempt to unlock them. Doing so might break the elements.

2. Hold each wing boom and turn its elements until they snap squarely into place (perpendicular to the wing boom).

3. Fold out the wing booms and secure them into position with the two supplied 1 1/4-inch screws and wing nuts.



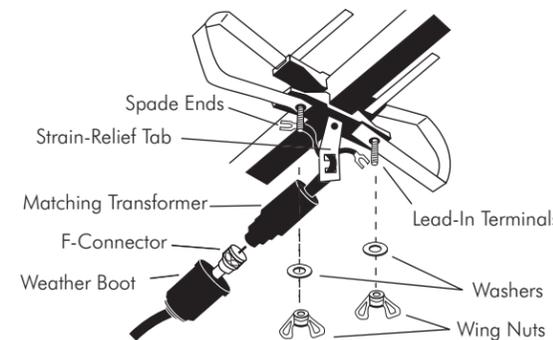
4. Press the supplied small end plugs into the wing booms.

Step 3 ■ Connecting the Coaxial Cable

We recommend RG-6 cable and, if you prepare your own cable, a quality F-connector. (Your local electronics store carries a variety of suitable cables and connectors.)

Note: If you prepare your own coaxial cable, be sure to slide the supplied matching transformer's weather boot onto the cable before you attach the F-connector.

1. Thread the supplied matching transformer's spade terminals through the antenna's strain-relief tab.
2. Slide the spade terminals around the antenna's lead-in terminals (on both sides of the boom), then secure them with the supplied washers and wing nuts.
3. Screw the cable's F-connector onto the matching transformer.
4. Slip the weather boot over the connection. If you use a pre-built cable without a weather boot, cover the connection with weather-resistant tape.

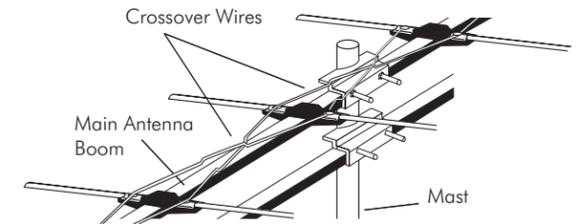


Step 4 ■ Attach to the Mast

We recommend that you enlist the help of another person before you put up the mast or attach your antenna to it. How you set up your mast depends on your specific installation. Refer to the **Consumer Product Safety Commission** for recommended methods.

1. Slide the antenna's mast clamp assemblies over the end of the mast.
2. Tighten the mast clamp assemblies lock nuts to hold the antenna in place. Do not over tighten the lock nuts.

Caution: The crossover wires must not touch the antenna boom, the mast, or each other. If necessary, carefully bend the crossover wires to provide at least 1/2-inch of clearance between the parts.



3. Set up the mast, then rotate it so the antenna's shorter elements point toward the broadcast antennas of the stations you want to receive.

Step 5 ■ Routing the Cable to Your Audio/Video System

- Use plastic tape or mast standoff insulators to secure the coaxial cable to the mast at about 3-foot intervals. Continue down the roof and the side of the house using roof and wall standoff insulators.
- Use coaxial cable nail clips every few feet to secure the cable between the mast and where the cable enters the house.
- Use a 75 ohm grounding block (available at your local electronics store) where the coaxial cable enters the house. Read the **Consumer Product Safety Commission Information** for grounding instructions.
- Use a wall-through lead-in tube (not supplied) to neatly route the coaxial cable through walls.
- Loosely bend the cable to form a drip loop before the cable enters the house.
- Connect the antenna's coaxial cable to your audio/video system's antenna terminals according to the types of connections you have. Your local electronics store carries a variety of splitters and other accessories; choose the one that best suits your needs.

Limited Warranty

This product is warranted by Antennacraft against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from Antennacraft dealers.

EXCEPT AS PROVIDED HEREIN, ANTENNA-CRAFT MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, ANTENNA-CRAFT SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF ANTENNA-CRAFT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the sales receipt as proof of the purchase date to any ANTENNA-CRAFT dealer. ANTENNA-CRAFT will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of ANTENNA-CRAFT. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by an ANTENNA-CRAFT authorized service facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

WARNING: INSTALLATION OF THIS PRODUCT NEAR POWERLINES IS DANGEROUS. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS.



WATCH FOR POWER LINES! You can be KILLED if this antenna comes near electric power lines. READ INSTRUCTIONS.

IF AN ACCIDENT SHOULD OCCUR WITH POWER LINES

1. Call for emergency help.
2. Don't touch a person who has come in contact with the antenna and the powerline (you'll be electrocuted, too).
3. If the victim is free and clear from any electric powerlines and is unresponsive, administer CPR until emergency help arrives.

FOLLOW THESE RULES AND LIVE

1. If you're not sure about a careful, safe installation—don't try to do it yourself. Call your local power company or check with Yellow Pages under "Antennas or Television and Radio Antenna Systems" for an installer in your area.
2. With at least two people, assemble as much of the antenna on the ground as possible.
3. Watch out for overhead power lines. Check the distance to the power lines before you start installing—**WE RECOMMEND YOU STAY A MINIMUM OF TWICE THE MAXIMUM LENGTH OF THE ANTENNA AND ITS MAST AWAY FROM ALL POWER LINES.**
4. Do not use a metal ladder.
5. Remember, even the slightest touch of an antenna to a power line can cause a fatal shock.
6. Don't try to do the job on a windy day.
7. Have a friend watch as a spotter on the ground when you're on the roof to see things you can't.
8. If you start to drop the antenna, get away from it and let it fall.
9. If any part of the antenna comes in contact with a power line **CALL YOUR LOCAL POWER COMPANY; DON'T TRY TO REMOVE IT YOURSELF!** They will remove it safely.
10. Keep mast, lead-in and metal guy wires away from power lines, too. They are all excellent conductors of electrical current.
11. Be sure everyone understands the danger of touching an overhead power line. Tell them never to try to remove any object touching a power line.
12. Make sure the antenna and mast are properly grounded.

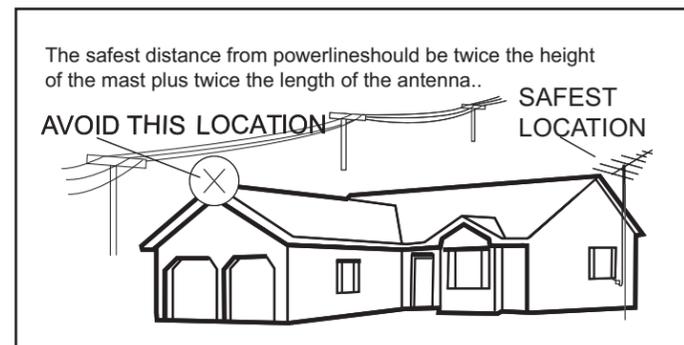
SELECT AND MEASURE YOUR INSTALLATION SITE

Before attempting to install your antenna, think of where you can best place your antenna for safety and performance. Most antennas are supported by pipe masts attached to the chimney, roof, or side of the house. Generally, the higher the antenna is above the ground, the better it performs. A good practice is to install your antenna about 5 to 10 feet above the roof line and away from power lines and obstructions.

Remember that the FCC limits your antenna height to 60 feet. If possible, find a mounting place directly above your set, where the antenna lead-in wire can take a short, vertical drop on the outside of the house for entry through a wall or window near the set. To determine a safe distance from wires, power lines, and trees:

1. Measure the length of your antenna.
2. Add the antenna length to the height of your tower or mast.
3. Double this total for the minimum recommended safe distance.

If you cannot maintain this safe distance, **STOP! GET PROFESSIONAL HELP.**



CHOOSING A STRUCTURE MOUNT

Follow the installation directions for the individual type of mount you choose.

BASE AND ROOF MOUNT: Mast locks into U-bolt. Swivel base fits the slope of most rods.

UNIVERSAL MAST ANCHOR MOUNT: Has U-bolt for easy swivel. Adapts to most roof slopes.

VENT PIPE MOUNT: For smaller antennas. Attaches to vent pipe.

WALL MOUNTS: Used on side of structure.

EAVE MOUNT: For attaching antenna mast to hanging rafters or trim boards.

CORNER MOUNTS: Two Y-mounts with straps for chimney corner mounting.

CHIMNEY RATCHET MOUNT: Provides secure mounting to chimney with straps.

TRIPOD MOUNT: Sturdy antenna mount for larger antennas subject to stronger winds. Fits most roof slopes.

TOWER: Not recommended, for professional use only.

TELESCOPIC MAST: Has interlocking sections, for professional use only.

GENERAL INSTALLATION DIRECTIONS FOR MAST MOUNTED ANTENNAS

1. Assemble your new antenna on the ground at the installation site. Follow the separate assembly instructions that come with it.
 2. Install the selected mount for your antenna.
 3. Attach the mast and antenna to the mount.
- Note:** If you are going to use guy wires:
- Install guy wire anchor bolts
 - Estimate length of guy wires and cut them
 - Attach to mast using guy wire ring
 - Have a second person hold the mast upright while the guy wires are attached and tightened to the anchor bolts

4. IF YOUR MAST DOES NOT HAVE A DANGER LABEL, INSTALL THE SELF-ADHERING DANGER LABEL PACKAGED IN ANTENNA HARDWARE KIT AT EYE LEVEL ON YOUR MAST.

ANTENNA GROUNDING

To protect your house and your TV/FM installation, your antenna system must be properly grounded.

1. Clamp a #10 copper wire to the base of the antenna mast. Using standoffs every 4 to 6 feet, run the wire down the building in as straight a line as possible.
2. Attach a 75 ohm grounding block (available at your local electronics store) to the antenna's lead-in cable as close as possible to the point where the cable enters the house.
3. Attach the grounding wire to the cable's grounding block and run the wire to the central building ground.

Acceptable central building ground points may include:

- Grounded interior metal cold water pipe within five feet of the point where it enters the building.
- Grounded metallic service raceway
- Grounded electrical service equipment enclosure
- 8-foot grounding rod driven into the ground (only if bonded to the central building ground by #6 or heavier bonding wire)
- Other acceptable grounding electrodes that comply with sections 250 and 810 of the National Electrical Code (NEC).

ANTENNA REMOVAL

To remove the antenna, follow the instructions for installing the antenna, but start with the last step first. That's the only safe way to remove an antenna.

