

## Unpacking

Make sure the following pieces are in the box:

(1) Drive unit

(1) Control unit

(1) Remote control

### Hardware kit:

(2) U Bolts

(4) Threaded inserts

(3) U Bolt brackets

(1) Guy wire bracket

(8) Nuts with lock washers attached

(4) Nuts without washers

## Installing the Outdoor Drive Unit

### Step 1: Attach cable to the drive unit

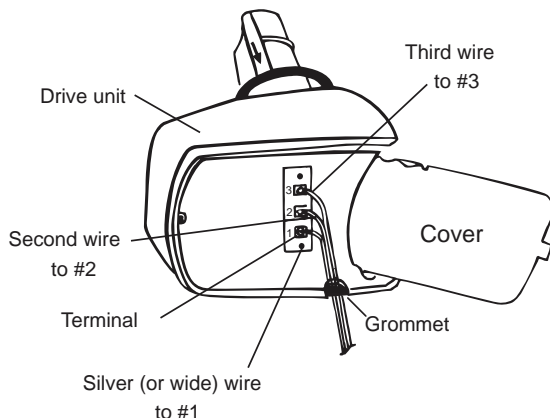
1. Run cable (not included) to the drive unit.

**IMPORTANT:** Up to 280' (84m) of 20AWG 3 conductor cable may be used. For longer runs, use heavier gauge wire.

2. Unscrew the single screw on the bottom door. Swing the door open.

3. Remove the grommet and insert the cable thru the slot. Press the grommet back into the housing.

4. Separate leads for 1.5" (4cm) and strip off the insulation for 0.5".



**IMPORTANT:** To avoid moisture collecting in the cable make sure the cable jacket passes thru the grommet.

5. Find the silver- or wide-jacketed lead and connect it to terminal 1. Connect the adjacent lead to terminal 2. Connect the third lead to terminal 3. If 4 wire cable is used, connect both wire 3 and 4 to Terminal 3.

**IMPORTANT:** Make sure there are no loose strands which can short between terminals.

6. Doublecheck the wiring order. Close the door and screw it back into place.

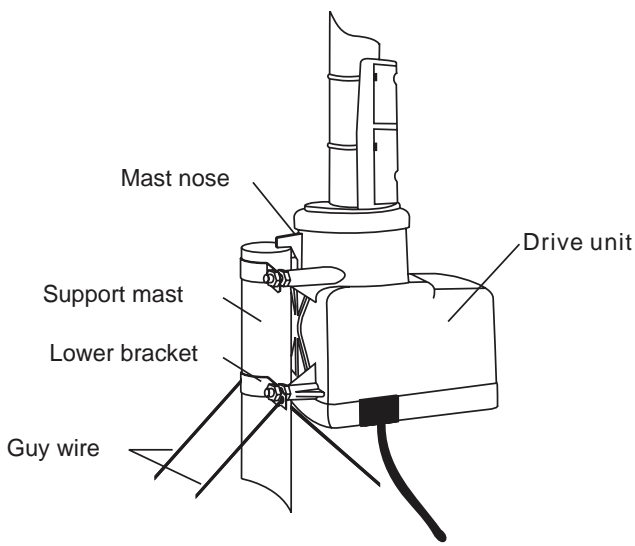
### Step 2: Mount the drive unit

If you're not mounting the unit inside a tower, you'll need to mount it to a separate mast (not included). This kit comes with the necessary hardware for mounting.

**CAUTION:** Select a mounting location where the antenna cannot come in contact with power lines while it is being installed, and where the installation will not fall across power lines if a guy wire should fail.

1. Screw the 4 threaded inserts in the four holes in the side of the drive unit base. One end of each insert has a slot you will use with a flat-head screwdriver to make sure the inserts are in as far as they will go. Make sure you put the *opposite* end in the drive unit. Then screw the inserts as far as they will go into the drive unit.
2. Screw the washerless nuts onto the inserts until they are snug against the drive unit.
3. Put the largest of the four brackets onto the ends of the bottom two inserts. Put the nuts with attached lock washers on the very end of the inserts to keep the bracket in place.
4. Put one of the other brackets onto the ends of the top two inserts. Put the nuts with attached lock washers on the very end of the inserts to keep the bracket in place.
5. Position the brackets and nuts/washers so that they leave just enough room for the support mast to go through.
6. Lower the drive unit onto the support mast until it stops on the mast nose of the drive housing. Tighten the nuts. Moderate tightening with a 7/16" wrench will cause the teeth to grip the mast securely.

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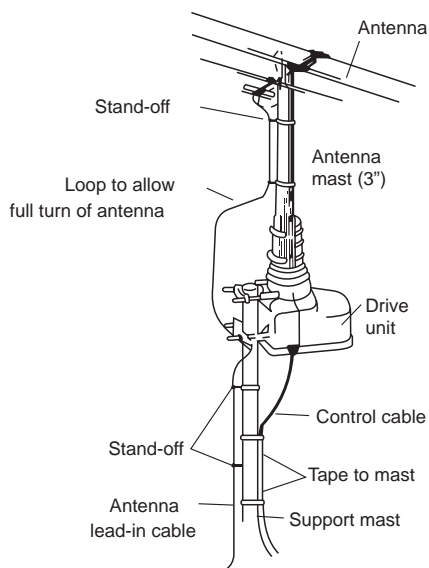


**IMPORTANT:** Do not overtighten to the point that you deform the mast, since this will reduce its strength. Mast diameters of 1.25" to 2" (3-5cm) may be used. The 1.5" (3.8cm) size or larger is recommended for unguied masts over 6' long, or where large antennas are used. If guy wires are used, fasten two through each of the two holes of the lower bracket.

### Step 3: Install the antenna/cable

1. Insert the 2 U-bolts through the back of the rotor section of the drive unit.
2. Place the remaining 2 brackets over the ends of the U-bolts.
3. Put the nuts with attached lock washers on the very end of the U-bolts to keep the brackets in place.
4. Position the brackets and nuts/washers so that they leave just enough room for the antenna mast to go through.

**Note:** Use no more than 3" of antenna mast between the rotor and the antenna itself.

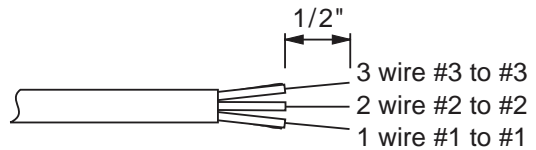


5. Lower the antenna mast between the brackets and the rotor. Tighten the nuts. Moderate tightening with a 7/16" wrench will cause the teeth to grip the mast securely.
6. After connecting the antenna lead-in cable to the antenna, fasten it to the antenna mast using stand-off insulators (not included) as shown. Provide a generous loop at the drive unit.
7. Attach the lead-in cable to the support mast with stand-off insulators (not included) approximately every four feet.
8. Tape the rotator control cable directly to the support mast.

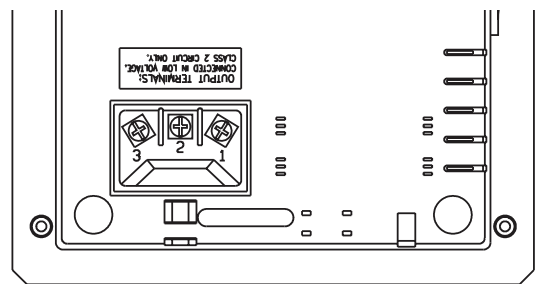
## Installing and Programming the Indoor Control Unit

### Step 1: Set up to the control unit

1. Determine the length of cable needed to run between the outdoor and indoor units. Cut the cable to that length.
2. Strip about 1/2" of the jacket off the end of each wire.



3. Insert each bare wire into the connector plate on the control unit's back panel as shown below.



4. Release jacket to secure on connector.

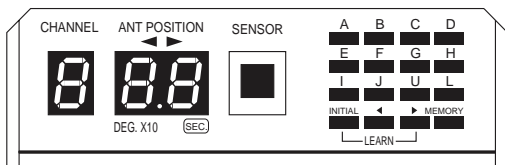
**IMPORTANT:** The unit must be wired correctly. Damage can result from improper wiring.

5. Plug power cord of the control unit into AC outlet.
6. Turn on the unit.

The CHANNEL on the front panel reads **0**, and the ANT POSITION display reads **00**.

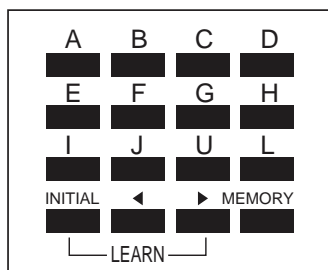
## Step 2: Program the control unit

1. Press the **INITIAL** key on the control unit's front panel keypad. The control unit and rotator are initializing to prepare for initial setup. The CHANNEL and POSITION indicators blink during this process, which takes about a minute and a half. When the CHANNEL and POSITION indicators stop blinking, the control unit and rotator are ready for setup.
2. Press the **INITIAL** key. The ANT POSITION display shows **36** to **0**.



### NOTES:

- You must perform the learning procedure before installing the antenna mast. This procedure allows you to make sure the rotator goes the entire 360° with no problems. See the Learning section below for more information.
  - A strong storm or power failure may cause the rotator to change position. Use the **INITIAL** key to re-synchronize the system. If this reset procedure doesn't get the desired results, the antenna of driver motor may be misaligned on the antenna mast. You can either go to the antenna and re-orient it or program the control unit to correspond to the new antenna orientation.
3. Tune your TV to the station that you want to receive.
  4. While watching your TV screen, press the < and > keys on the control unit's front panel to move the antenna clockwise (>) and counter-clockwise (<) until you find the position that gives you the best reception for this channel.



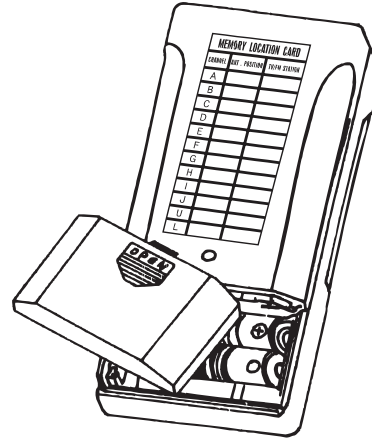
5. When you've found the best antenna position for this channel, press the **MEMORY** key on the control unit's front panel. The ANT POSITION indicator blinks.
6. Press one of the letter keys on the control unit's front panel to store the antenna position for this station to that key. The ANT POSITION indicator shows the degree of the antenna's position.

**Note:** Using a letter key that already has a position stored to it in this step erases the old position stored and stores the new one.

7. The back of the control unit's remote control has a chart for recording the channel and antenna position corresponding to each letter key. Write down this information on this chart.
8. Repeat steps 3-7 for the next TV station. Choose a different letter key to store its location.

You can store up to 12 antenna positions so that you can easily find the best reception for each TV station.

## Step 3: Install batteries in the remote



1. Press and push the battery compartment cover to remove it.
2. Insert the batteries, matching the batteries to the (+) and (-) marks inside the battery compartment.
3. Push the battery cover back into place.

### Battery Precautions:

- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel cadmium) batteries.
- Always remove old, weak or worn-out batteries promptly and recycle or dispose of them in accordance with Local and National Regulations.

## Using the Programmable Antenna Rotator

**To go to a programmed antenna position:** Press the letter key for that position on the remote or on the control unit's front panel.

The drive unit turns the antenna to that position, and the control unit displays the position of the antenna in degrees.

**To stop the rotator while it's going to a programmed position:** Turn the control unit off, then turn it back on. Press the **INITIAL** key to resynchronize the unit.

**To fine-tune the antenna position (or position manually):** Press the > or < keys on the remote control or control unit's front panel to move the antenna clockwise (>) or counter-clockwise (<).

**Note:** If you press the **INITIAL** key by mistake, press the **INITIAL** key again to stop the reset procedure. Then continue with the action you were trying to perform.

## Performing the Learning Procedure

1. Simultaneously press and hold the **INITIAL** and > keys (make sure you press the **INITIAL** key first).  
The rotator turns a full 360° cycle.
2. Release both keys at the same time. The ANT POSITION indicator displays the rotator cycle time.  
The control unit uses this information to keep the antenna positions and program locations synchronized.

## Resetting the Memory Keys

Resetting the control unit's memory keys erases all programmed antenna positions.

1. Turn off the control unit.
2. Press and hold the **D** key on the control unit's front panel.
3. While holding the **D** key, turn the control unit back on. The < and > indicators light up.
4. Release the **D** key and turn the unit back off.
5. Turn the unit back on a second time. The unit will perform the initialization procedure.

The CHANNEL on the front panel reads **0**, and the ANT POSITION display reads **00**. The unit is resetting its memory.

## 12 Month Limited Warranty

Audiovox Electronics Corporation (the "Company") warrants to the original retail purchaser of this product that should this product or any part thereof, under normal use and conditions, be proven defective in material or workmanship within 12 months from the date of original purchase, such defect(s) will be repaired or replaced (at the Company's option) without charge for parts and repair labor. To obtain repair or replacement within the terms of this Warranty, the product along with any accessories included in the original packaging is to be delivered with proof of warranty coverage (e.g. dated bill of sale), specification of defect(s), transportation prepaid, to the Company at the address shown below. Do not return this product to the Retailer.

This Warranty is not transferable and does not cover product purchased, serviced or used outside the United States or Canada. The Warranty does not extend to the elimination of externally generated static or noise. This Warranty does not apply to costs incurred for installation, removal or reinstallation of the product, or, if in the Company's opinion, the product has been damaged through acts of nature, alteration, improper installation, mishandling, misuse, neglect, accident, or the simultaneous use of different battery types (e.g. alkaline, standard or rechargeable). This Warranty does not cover damage caused by an AC adapter not provided with the product.

THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE AND, IN NO EVENT, SHALL THE COMPANY'S LIABILITY EXCEED THE PURCHASE PRICE PAID BY PURCHASER FOR THE PRODUCT.

This Warranty is in lieu of all other express warranties or liabilities. ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO DURATION OF THIS WARRANTY. ANY ACTION FOR BREACH OF ANY WARRANTY HEREUNDER, INCLUDING ANY IMPLIED WARRANTY, MUST BE BROUGHT WITHIN A PERIOD OF 24 MONTHS FROM THE DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER. No person or representative is authorized to assume for the Company any liability other than expressed herein in connection with the sale of this product.

Some states/provinces do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damage so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state/province to state/province.

**U.S.A.:** Audiovox Electronics Corporation, 150 Marcus Blvd., Hauppauge, New York 11788

**CANADA:** Audiovox Return Center, c/o Genco, 6685 Kennedy Road, Unit 3, Door 16, Mississauga, Ontario L5T 3A5

## Consumer Product Safety Commission Information

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



**WATCH FOR POWERLINES!  
You can be KILLED if this antenna comes near electric powerlines.  
READ INSTRUCTIONS**

### IF AN ACCIDENT SHOULD OCCUR WITH POWERLINES

1. Call for emergency help.
2. Don't touch a person who is in contact with the antenna or the powerline (you'll be electrocuted, too).
3. If the victim is free and clear from any electric power lines and is unresponsive, check their breathing and pulse. If the victim is not breathing, administer artificial respiration. If they have no pulse, 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 powerlines. Check the distance to the powerlines before you start installing—**WE RECOMMEND YOU STAY A MINIMUM OF TWICE THE MAXIMUM LENGTH OF THE ANTENNA AND ITS MAST AWAY FROM ALL POWERLINES.**

4. Do not use a metal ladder.
5. Remember, even the slightest touch of an antenna to a powerline 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 powerline—**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 powerlines, too. They are all excellent conductors of electrical current.
11. Be sure everyone understands the danger of touching an overhead powerline. Tell them never to try to remove any object touching a powerline.
12. Make sure that the antenna and its mast are properly grounded.

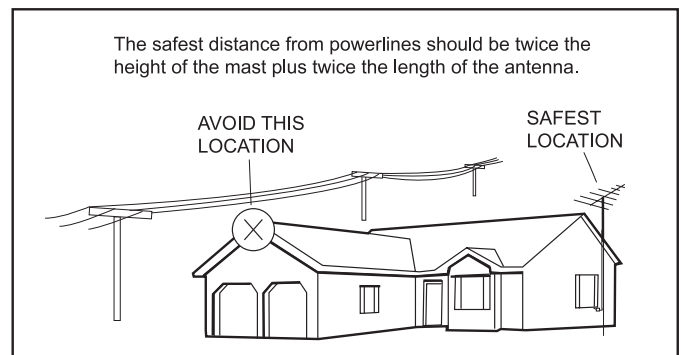
### HOW TO SELECT AND MEASURE YOUR INSTALLATION SITE

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 roofline and away from powerlines 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, powerlines, 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.**



### ANTENNA GROUNDING

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

1. Clamp a #10 copper or #8 aluminum grounding wire to the base of the antenna mast. Using stand-offs every 4 to 6 feet, run the wire down the building in as straight a line as possible.
2. Attach a 300-Ohm static discharge unit (lightning arrester) or a 75-Ohm grounding block 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 lead-in cable's grounding unit 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 electrodes that comply with the sections 250 and 810 of the National Electrical Code (NEC)