

OWNERS MANUAL



MODEL AS 2000

INSTALLATION INSTRUCTIONS

AntennaTek, Inc.

425 S. Bowen #4
Longmont, CO 80501

Phone 303-772-9591
FAX 303-774-9533
www.antennatek.com

INSTALLATION INSTRUCTIONS

TABLE OF CONTENTS

Intro.	Introduction	1
I	Tools Required for Installation	2
II.	Extra Parts Needed	2
III.	Important Precautions	2
IV.	General Installation Information	2
	Placement of Electronics	2
	Location Considerations	2
	Placement of Dish on Roof	2
	Installation Check List	2
V.	Roof Mount Using Standard Installation Kit	3
VI.	Installation of Wire Harness	4
VII.	Connection of Electronic Components	5
	Receiver	5
	Controller	5
	Coax out to TV	6

Congratulations on your purchase of an AntennaTek Satellite System. There has been over ten years of engineering in this system. Please read through this entire manual, and the Receiver's manual before beginning the installation. Should you have any questions, please call the AntennaTek technical support department at:

(303) 772-9591

I. TOOLS REQUIRED FOR INSTALLATION

Marking Pen
Electric Drill
Measuring Tape
Socket Wrench 7/16"
Utility Knife
Screw Driver (#2 Phillips & Regular)
Caulking Gun
Hole Saw - 1-1/4"

II. EXTRA PARTS NEEDED

Silicone Adhesive
Silicone Sealant
RG-6 Coax Cable with Connectors for TV
A-B Switch
Wire Ties

III. IMPORTANT PRECAUTIONS

- Read the entire installation procedure before starting installation.
- Check with coach manufacturer for roof construction and routing of coach wiring.
- Use a silicone sealant on top of all screws in the roof and seal the 90 degree elbow where the wire harness enters the coach.

IV. GENERAL INSTALLATION INFORMATION

A. Placement of the electronics

Following are the electronics components located in the coach:

1. The Controller: Used to position the dish on the satellite. It requires 12V DC.
2. The Satellite Receiver processes the signal from the dish into satellite TV channels, then transfers this information to the TV set (which is used as a monitor on either channel 3 or 4). The Receiver requires 110 VAC only. The Receiver allows you to subscribe to the pay channels.

B. Important consideration when deciding on a location for the electronics

1. **Receiver** (not included): Operates on 110V AC. Needs access to AC current where the unit will be located.
2. **Controller** (Positioner): Operates on 12V DC. Needs access to DC current where unit will be located.
3. **Distance from the Dish to Components:** The standard 25' cable run can be used-up in the process of routing through the coach's cupboards and closets. Try to keep the run of cables as straight as possible.

Note: Cable Kits up to 100' are available by special order.

4. Getting the satellite signal to the TV.

Read the section on coax cable installation (Section VII). This will advise whether to connect the coax cable that supplies the processed satellite signal to either the existing coach wiring or directly to the TV set.

5. A good view of the TV screen while operating the satellite receiver and controller is beneficial.

Note: Generally an overhead cabinet works best and keeps equipment out of the way when not in use

C. Placement of dish on roof.

1. Mounting arrangement/location.
 - a. Locate a clear area on roof measuring 34" x 20". (Figs 1 & 2).
 - b. Dish should be positioned towards the rear of the coach as the recommended position.

Caution: Be sure of roof construction when mounting on solid roof. Contact coach manufacturer to verify materials. AntennaTek, Inc. is not responsible for damage due to improper installation of the satellite system.

D. Installation Check List

- *Check for adequate roof clearance
- *Determine placement of electronics
- *Determine method of connecting coax from receiver to the existing coach wiring or direct to TV set.
- *Verify 110V AC in cabinet for receiver
- *Verify 12V DC in cabinet for controller

V. ROOF MOUNT USING STANDARD INSTALLATION KIT

1.
 - A. Transfer the Dish and Lift ASM to the RV roof for mounting.
 - B. Set Lift ASM in its pre-determined place on RV roof making sure the dish mounting bracket is toward the rear of the coach.

2.
 - A. Attach wires to the controller (Fig. 3).

B. Turn controller ON and press Start button, the LCD will display "AntennaTek" then "Copy 1999", press the Start button again, the LCD will display Travel Position. Press Start button again, the dish mounting bracket will start to elevate. When the

dish mounting bracket is in the vertical position (90 degrees), press the Start button so Dish stops and remains in the vertical position to allow access to the base plate for mounting on the roof. Using (4) 1/4 x 3/8 screws and nuts attach the Dish to the mounting bracket.

NOTE: Rotate dish with azimuth motor to allow for easy access around dish.

3. A. Before returning dish to travel position, outline baseplate on roof using a marking pen.

B. Carefully set aside the Lift ASM and use silicone adhesive on the pre-marked areas. Cover entire area as shown (Fig. 3).

C. Set Lift ASM down over the silicone adhesive.

D. Secure baseplate to roof using #10 x 1" Mounting screws. To prevent leakage, coat the top of each screw head with silicone sealant.

CAUTION: Do not over tighten as holes in roof may strip out.

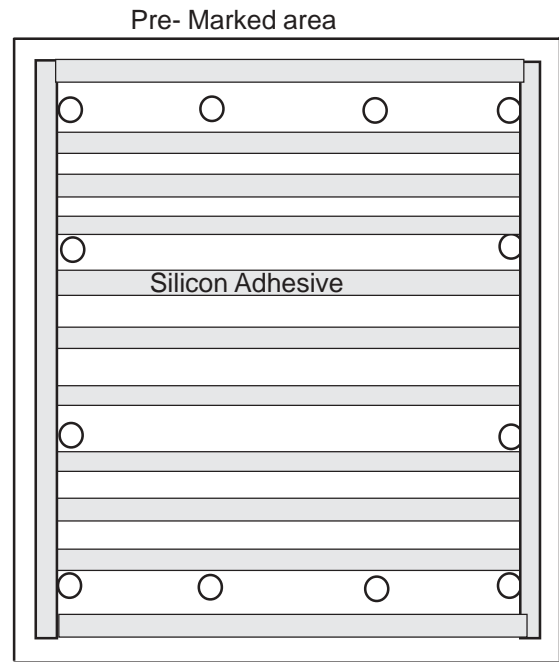


Figure 3

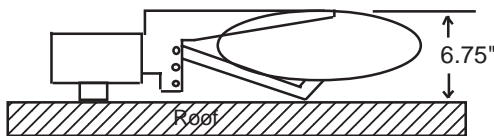


Figure 1

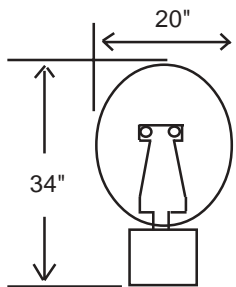


Figure 2

Controller rear view

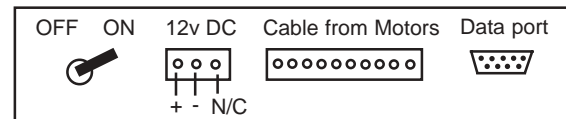


Figure 4

Controller front view

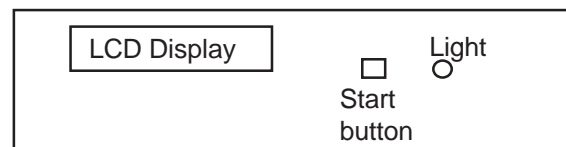


Figure 5

VI. INSTALLATION OF WIRE HARNESS ON ROOF

1. A. Using a 1-1/4" hole saw, gently cut upwards through the first layer of the ceiling from the inside of the Predetermined cabinet.

NOTE: If there is a vinyl covering on the ceiling, use a utility knife to cut a hole first. This will prevent the hole saw from tearing the vinyl.

B. Use a small screw driver to remove the first layer if it is still in position.

C. With your finger, feel around for any wires that might be in the way and move them to the side.

NOTE: If roof is solid foam filled, use a screw driver and chip away until you reach the next layer.

D. Using a 1/8" drill bit, drill a pilot hole upward through the roof in the center of the 1-1/4" hole.

2. A. Locate the pilot hole on top of the roof and drill a 1-1/4" hole down into RV, using 1-1/4" hole saw.

B. Work the PVC fitting down into roof and then remove.

CAUTION: IN ORDER TO KEEP A SNUG FIT, DO NOT OVERDRILL.

3. A. Stretch out both cables from dish base (motor drive, coax) and slip through the one end of the 90 degree PVC elbow.

B. Lay wires down on the pre-determined path on roof starting at the dish base, and running to the 1-1/4" hole where the 90 degree fitting will enter.

C. Push the ends of the wire harness through roof into coach until you reach the 90 degree fitting.

4. A. Fill the 90 degree fitting full of silicone sealant starting at one end and then the other.

B. Lay a large bead of silicone around the outside of the 1-1/4" hole and carefully push the silicone packed 90 degree fitting into roof forcing the silicone out around the fitting to create a waterproof seal.

CAUTION: It is important to make sure that the 90 degree fitting is surrounded by a thick bead of silicone to prevent any water leak damage inside coach.

5. Install wire harness clamp approximately every 24" into roof.

CAUTION: To prevent water damage, be sure to use a drop of silicone on roof and on top of screw heads.

VII. CONNECTION OF THE ELECTRONIC COMPONENTS

A. RECEIVER

NOTE: The actual connection on the Receiver will differ between manufacturers. Refer to the installation manual of your particular Receiver.

1. Connect the 3 ft. coax into the fitting marked "TVOUT", "TV SET", "TO TV", etc. Leave other end loose.

NOTE: This coax carries the output satellite signal and will now be connected directly to the TV set marked VHF, or set on top of Receiver and connect later to the appropriate A-B type or push button Video Selector Switch.

2. Connect the coax, RG 6, coming from the LNB on the Lift ASM to the fitting marked "SATELLITE IN".

3. Set the switch marked "Chan. 3,4" to either 3 or 4.

CAUTION: Be sure the Power Switch on the front of the Receiver is in the "OFF" position.

4. A. Plug the 110V AC Cord into 110 volt outlet.

B. Carefully set Receiver into its predetermined location, making sure not to crimp any wires.

NOTE: Coil up any excess wiring with a wire tie. Leave enough slack so Receiver can be pulled out for service.

B. CONTROLLER

1. A. Connect the gray motor drive cable coming from the Lift ASM into the rear of the controller. (Fig. 3)

B. Connect the Red wire to +12V DC and the Black wire to GND on the rear of the Controller. (Fig. 3)

WARNING - Reversing the polarity on the Red and Black wires will burn the Fuse.

C. Connect the Data Port Cable into the controller and receiver. (Fig. 3)

2. Coil up any excess wiring with a wire tie, leaving enough slack so controller can be pulled out for service.

C. “COAX - OUT TO TV”

Connecting this coax cable is the last step in this installation. Read through this entire section before making this final connection. Since the coax cables are hardly ever marked, it may be difficult to identify the coax cables going in and out of the A-B type or Push Button Video Selector switches. If the last coax (the one coming from rear of the Receiver marked “TV OUT”) is connected to the wrong fitting, you could waste an hour trying to figure out why you can’t get a picture on the TV set. So take your time and find one of the following examples that fits your coach.

NOTE: If you are not sure where to connect this coax then use Example 1 with a temporary direct connection from the Receiver to a TV set and proceed to the “Operation” manual. Then, once a satellite channel has been located you can remove the temporary coax to the TV set and connect the proper A-B or Push Button type video selector switch fitting. You will then know immediately if you have made the correct connection.

Use the following diagrams to determine the best method for this connection.

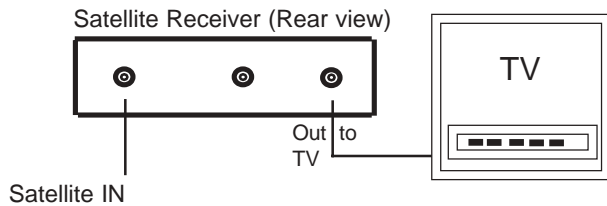


Figure 6

1. If your TV and Receiver are located together as shown:

A. Connect the coax from “TV OUT” fitting on Receiver to the TV set (Fig. 6).

2. If the coach has an A-B slide switch, (one way or “A” would be for “Antenna or the Satellite” and the other way or “B” would be for “Park Cable”) proceed as follows (Fig. 7).

A. Locate an A-B switch (not included).

B. Remove the coax connector from the existing switch from the “Park Cable” and connect it to the “B” side of the provided switch.

C. Connect the coax from the Receiver marked “TV OUT” to the “A” side of the provided switch.

D. Connect a coax (not included) from the antenna to the “IN from Antenna” on the rear of the satellite receiver. With this method of connection, you now have 3 choices:

1. For satellite, slide the A-B switch to “A” and turn satellite receiver “ON”.
2. For VHF antenna, turn satellite receiver “OFF”, leaving the A-B switch on “A”.
3. For park cable, slide the A-B switch to “B” or “Cable”.

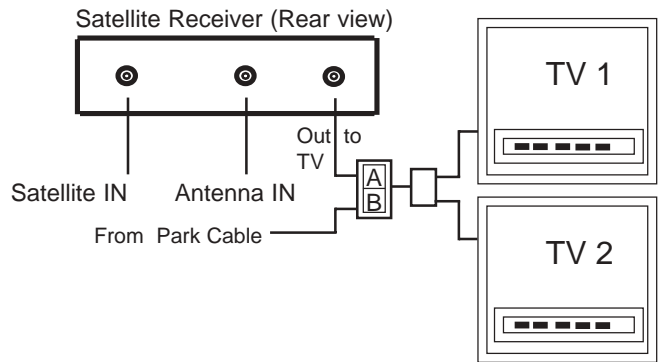


Figure 7

3. If the coach has only a VHF Antenna without a park cable or A-B switch or splitter (Fig. 8).

Connect the Antenna to “IN from Antenna” on the rear of the satellite receiver.

Run a coax from the “TV OUT” on Receiver to the TV set.

For satellite, turn satellite receiver “ON”

For Antenna, turn satellite receiver “OFF”.

4. If it is not possible to tap into the existing wiring or the coach is not wired at all with coax: Then carefully run a coax cable from the fitting marked “TV OUT” on the rear of the Receiver through the cupboards etc., directly to the “VHF” input on the TV set.

NOTE: If there are two TV’s then connect a splitter as shown (Fig. 8).

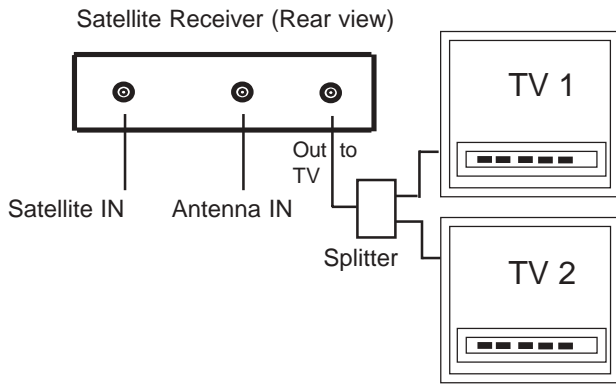


Figure 8

5. If the Coach is equipped with an amplified antenna and is prewired for Satellite, connect an RG-6 cable from the connector marked **satellite** on the wall plate to the rear of the satellite receiver "Satellite IN". From the satellite receiver "Out to TV" go to the center connector on the rear of the wall plate (Fig. 9). Use the switch on the wall plate to get the signal for the antenna or satellite. When the switch in front of the wall plate is ON the signal from the antenna will go to both TV's. When the switch is OFF the signal from the satellite receiver will go to both TV's.

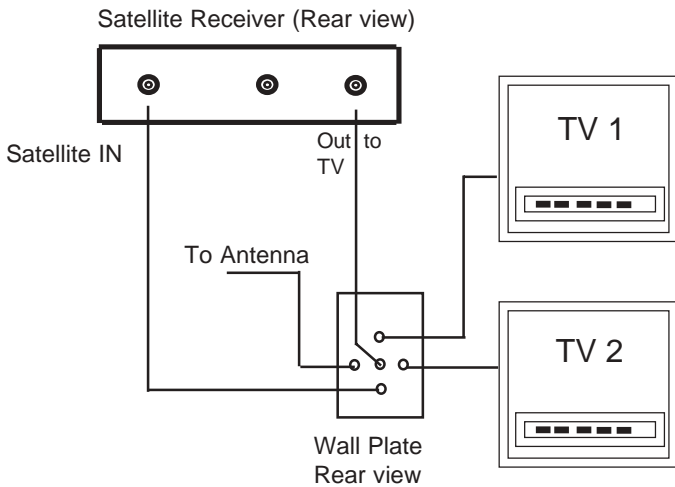


Figure 9

6. If the coach is equipped with a push button type video selector switch, connect the coax from the "TV OUT" on the Receiver to "Aux".

NOTE: Always make sure the TV set is on the proper channel (3 or 4) as marked on the rear of the Receiver.

WARRANTY

Know your rights and responsibilities before operating this product! Please read the "limited warranty" provided below carefully. Improper operation and maintenance, abuse, neglect, etc. will void your warranty.

AntennaTek, Inc. LIMITED WARRANTY

1. Duration:

- A. Satellite Antenna and lift : One year(365 days) from date of purchase.
- B. LNB : 90 days from the date of purchase.

2. Who gives the warranty?

AntennaTek, Inc. (the "Company")

3. Who receives this warranty?

The original purchaser (the "Purchaser"), other than for the purpose of resale.

4. What is covered under this warranty?

- A. Repair or replacement at no charge, parts found by the Company to be defective, provided that the Company receives notice of the defect within the duration of the warranty.
- B. Payment of reasonable freight charges incurred to repair or replace the defective part, as pre-authorized by the Company via an "Authorization to Return" form. Expedited shipment or shipment other than that offered by the Company is available as an optional, customer paid service.

5. What is not covered under this warranty?

A. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THE WARRANTY. LIABILITY FOR INDIRECT OR CONSEQUENTIAL DAMAGES FOR ANY INCIDENTAL EXPENSES, UNDER ANY AND ALL WARRANTIES IS EXCLUDED.

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

B. Any failure that results from accident, purchaser's abuse, neglect, improper maintenance, or failure to operate and use the product in accordance with the instructions provided in the owner's manual supplied with the product.

C. Any labor charges, travel time, or mileage incurred as a result of installing the replacement part.

D. Any failure that results from improper installation of the product.

E. Any component not sold or manufactured by the company.

F. Any loss of programming.

6. Responsibilities of purchaser under this warranty.

A. Provide proof of purchase to qualify for credits under provisions of coverage.

B. Promptly notify the seller, or alternately the Company, of any claim hereunder.

C. Obtain Authorization to Return from the Company and return the product to the Company: AntennaTek, Inc., 425 S. Bowen St., #4, Longmont, Colorado 80501.

D. Use reasonable care in the maintenance, operation, use and storage of the product in accordance with the instructions contained in the owner's manual.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.