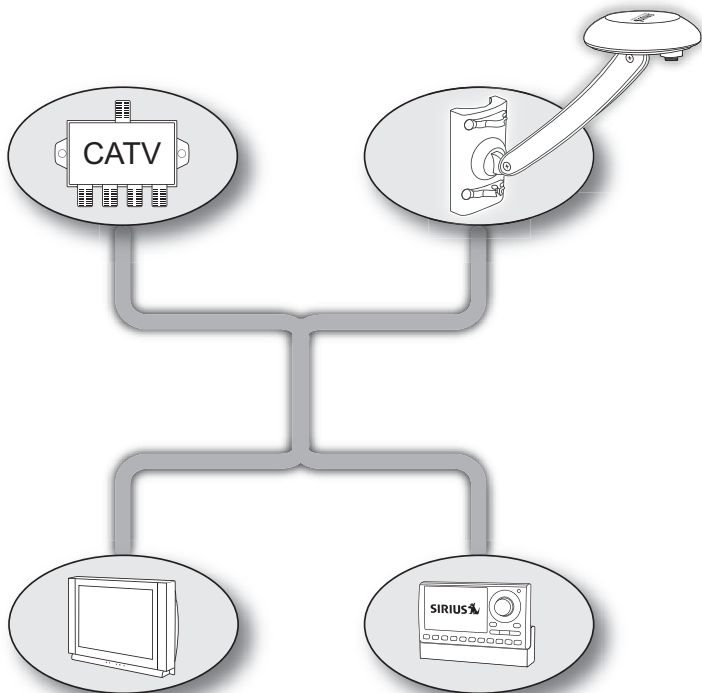


SIRIUS[®]



SATELLITE RADIO



Home Signal Distribution Kit for Cable TV Plus SIRIUS

For Use With a Single SIRIUS Radio

Installation Manual

Thank you for purchasing the Home Signal Distribution Kit for Cable TV Plus SIRIUS

The Home Signal Distribution Kit for Cable TV Plus SIRIUS will allow you to connect a SIRIUS radio using your existing cable TV RG-6 wiring. This allows you great flexibility as to where you locate the SIRIUS outdoor antenna and where you locate your SIRIUS radio. A short adapter cable is included for adapting the RG-6 cable to your SIRIUS radio.

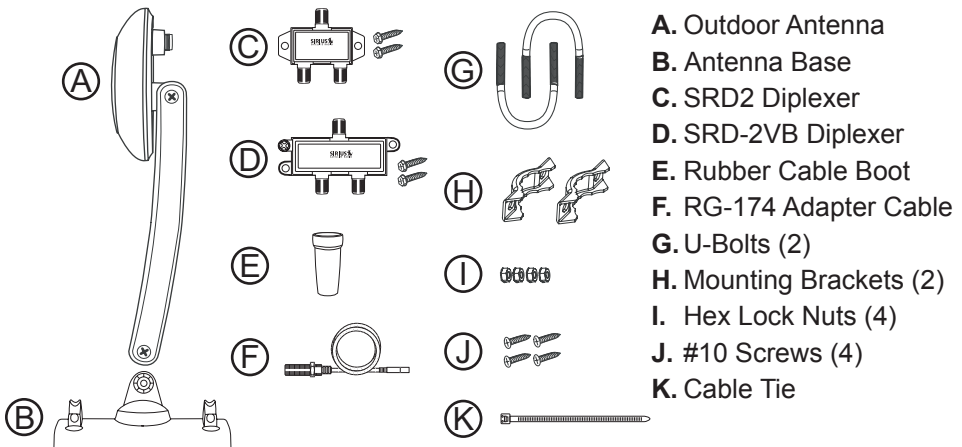
The SIRIUS outdoor antenna is a high-performance antenna, specifically designed to receive signals from the SIRIUS satellites and terrestrial (ground) transmitters when mounted outdoors on a home or other building, wall, pole, or roof. The antenna has been approved by Sirius Satellite Radio to receive the SIRIUS signal under a variety of conditions within the SIRIUS North American coverage area.

Installation of the antenna and diplexers requires experience in mechanical and electrical procedures. Review this installation manual before beginning the installation process. If you are not comfortable or experienced with the installation procedures, SIRIUS recommends that you have a professional install the kit and wiring for you.

The antenna should be mounted according to the instructions in this manual to ensure the best quality reception of the SIRIUS signal. All necessary mounting hardware for a variety of mounting options is included with this kit.

Box Contents

Open the box and verify that all the items shown below are included with the kit. If any items are missing, please contact your dealer or retailer immediately. Keep your purchase receipt and the packaging materials should you need to return or ship the kit.



Tools Required

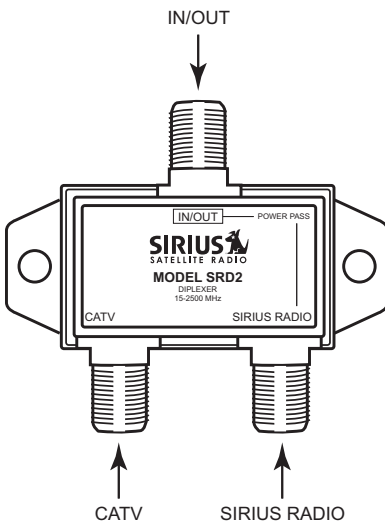
A phillips-type screwdriver and a 3/8 in. wrench is needed for installation. Depending upon the type of installation, a power drill with a 3/32 in. drill bit may also be required.

Caution and Warnings

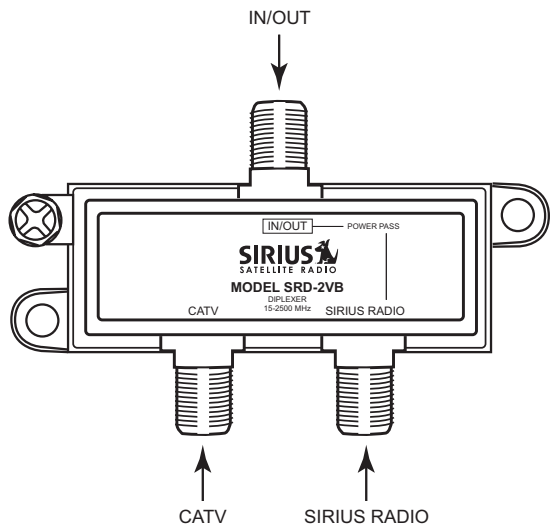
WARNING: Be sure not to cut, damage, or puncture the external jacket of the antenna cables during the installation procedure. Damage to the antenna cable can cause the SIRIUS signal to be degraded or unavailable, and can also cause water to intrude into the antenna cable causing the cable to fail.

Diplexer and Diplexer Port Identification

For a successful installation, the various cables used in the installation process described later in this manual must be connected to the correct ports on each Diplexer. The following illustration identifies the two different Diplexers, SRD2 & SRD-2VB, and the 3 ports on each Diplexer. This diagram should be used for reference during installation. **The SRD-2VB Diplexer must be used nearest to the SIRIUS radio.**



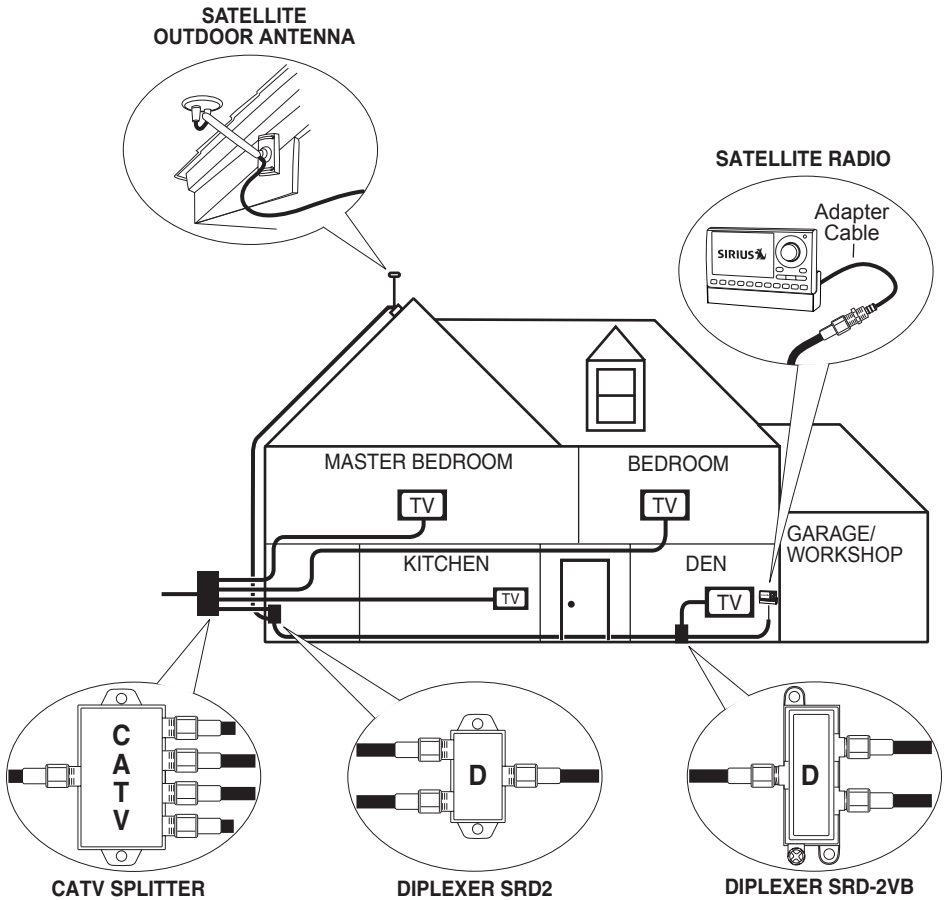
DIPLEXER MODEL SRD2



DIPLEXER MODEL SRD-2VB

Materials Required and Installation Considerations

In order to install the antenna you will need to purchase several lengths of RG-6 antenna cables to complete your installation. The following illustration shows a typical home installation.



A CATV splitter takes the cable TV service that comes into your home and splits the signal so that cable TV service can be connected two or more TVs in the different rooms in your home. In this manual, the CATV splitter is depicted as a 4-port splitter, however, the CATV splitter in your home may have 2, 3, 4, or more ports.

The CATV splitter is usually located near where the cable TV wiring enters your home, which is typically in a garage, basement, or utility room. You'll need to locate your CATV splitter in order to install the Home Distribution Kit.

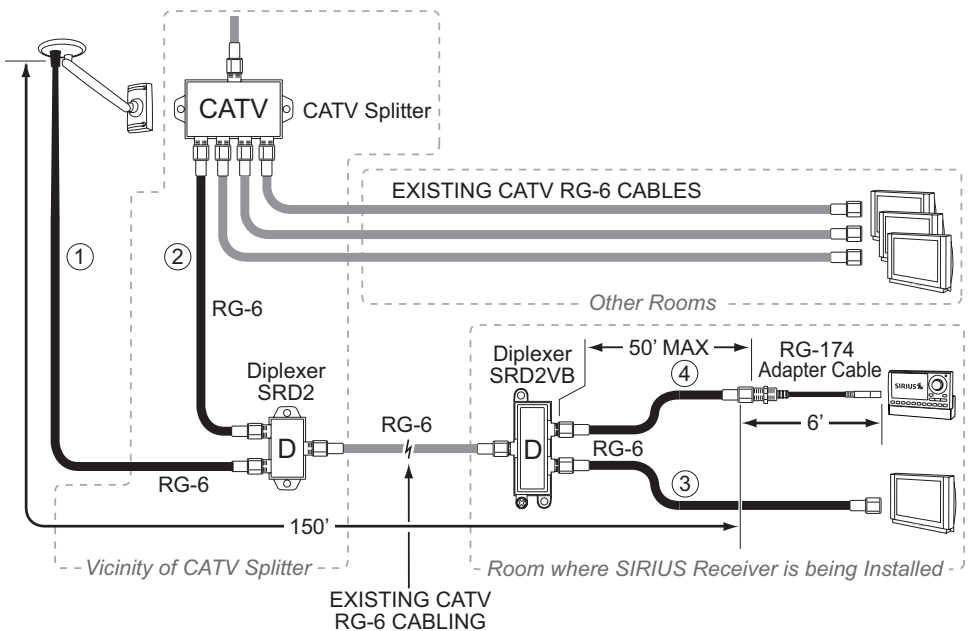
You may need to purchase up to four separate RG-6 cables of the appropriate lengths to install your Home Signal Distribution Kit. The number of cables which will be needed is dependent upon how the existing CATV wiring is installed in your home. Some homes have exposed, surface mounted CATV wiring while oth-

ers have the CATV wiring built into the walls with a CATV connection point in the room wall.

For homes having exposed wiring, cables will be needed for the following:

1. A length of RG-6 cable to go from the SIRIUS outdoor antenna to the location of the first Diplexer (SRD2).
2. A length of RG-6 cable to go from the CATV splitter to the first Diplexer (SRD2).
3. A length of RG-6 cable to go from the second Diplexer (SRD-2VB) to your TV.
4. A length of RG-6 cable to go from the second Diplexer (SRD-2VB) to your SIRIUS radio. **The length of this cable should not exceed 50 ft.**

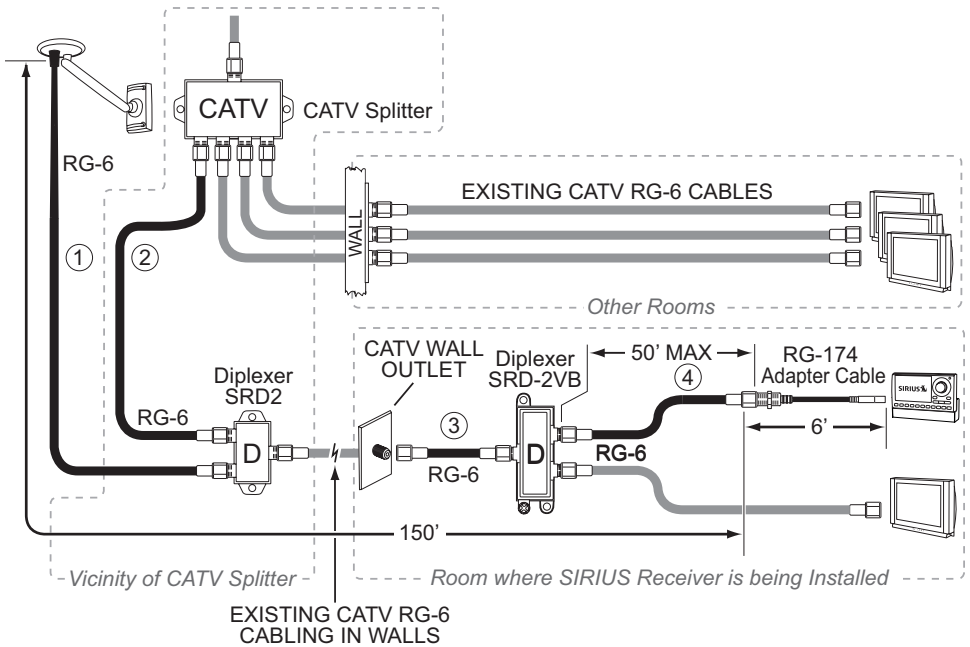
The cables which must be purchased are depicted in the following illustration as solid black, while existing cables are shown as gray.



For homes having hidden wiring, cables will be needed for the following:

1. A length of RG-6 cable to go from the SIRIUS outdoor antenna to the location of the first Diplexer (SRD2).
2. A length of RG-6 cable to go from the CATV splitter to the first Diplexer (SRD2).
3. A length of RG-6 cable to go from the CATV wall outlet connector to the second Diplexer (SRD-2VB).
4. A length of RG-6 cable to go from the second Diplexer (SRD-2VB) to your SIRIUS radio. **The length of this cable should not exceed 50 ft.**

The cables which must be purchased are depicted in the following illustration as solid black, while existing cables are shown as gray.



RG-6 cable is typically sold in short patch lengths, 3 or 6 ft., and longer lengths of 25, 50, or 100 ft., all with “F” type connectors on each end. These cables may be purchased at your local hardware store, home center, or electronics retailer.

The combined length of the RG-6 cables from the outdoor antenna to the SIRIUS radio should not exceed 150 ft., as shown in the preceding illustrations. The overall length for your particular installation may be less than 150 ft.

Determine the overall length of the RG-6 cable run by measuring the distance from the SIRIUS outdoor antenna mounting location to where the first diplexer will be located. (It is recommended that the diplexer be located indoors.) Next measure the distance from the first diplexer to where the second diplexer will be located. Then measure the distance from the second diplexer to the SIRIUS radio and note that this particular cable length **should not exceed 50 ft.** Also include the length of cable from the CATV wall outlet to the second diplexer if your home has hidden wiring. **The sum of these cable lengths should not exceed 150 ft.**

Installation Procedures

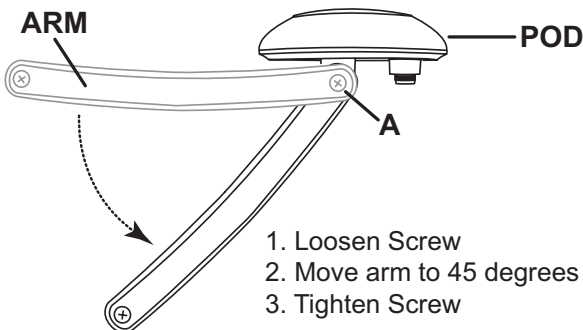
This installation section is broken into several sections. The first section describes how to install the SIRIUS antenna and is the same for all configurations. After installing the antenna, follow the Combiner/Splitter installation procedure section for your particular configuration.

SIRIUS Antenna Installation Procedure

A successful antenna installation consists of four steps: **First**, assembling the antenna; **Second**, determining a location for the antenna; **Third**, choosing a mounting option; and **Fourth**, adjusting and aiming the antenna. Please read the following four sections before beginning the antenna installation so that you understand the entire installation process.

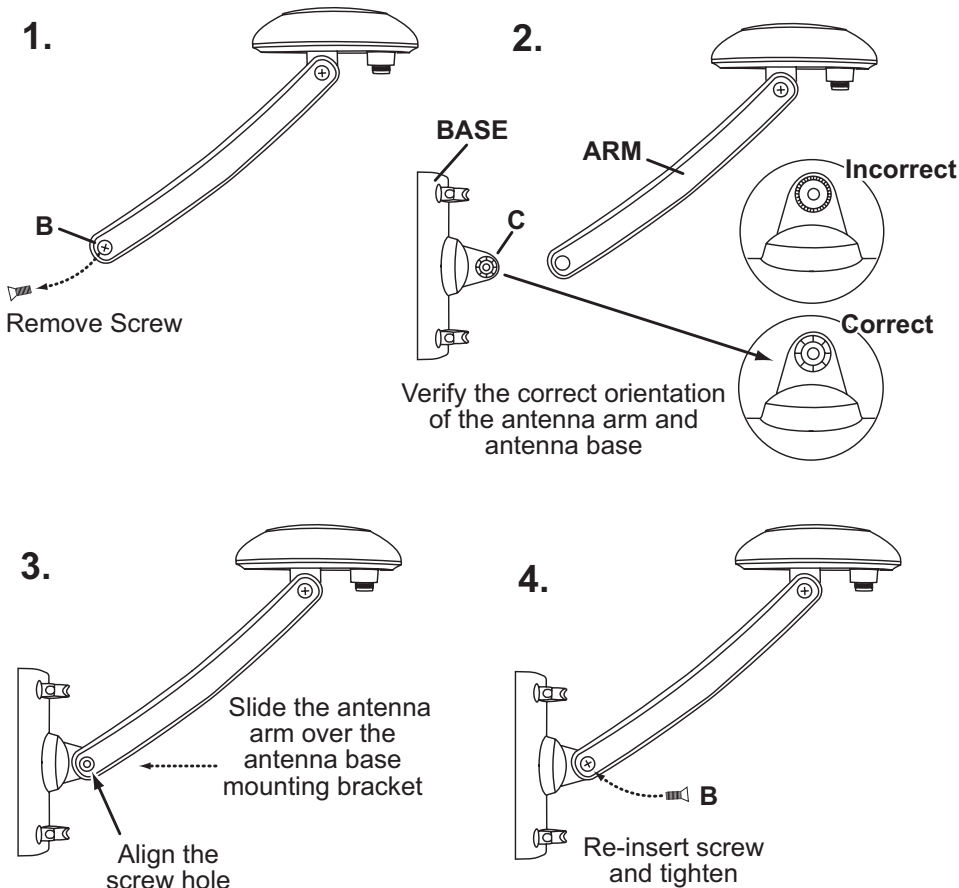
1. Assembling the Antenna

The antenna arm should be temporarily adjusted to be at a 45 degree angle relative to the antenna pod. To adjust the position of the arm, refer to the following figure and loosen screw **A** until the arm can be moved. Adjust the arm so that it's at a 45 degree angle and then tighten screw **A**.



Next, the antenna arm with the pod needs to be attached to the antenna base. Refer to the following figure and attach the antenna arm to the antenna base:

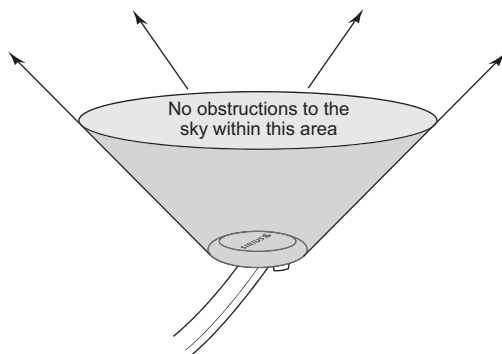
1. Use a phillips screwdriver to remove the screw **B** from the antenna arm.
2. The mounting bracket **C** on the antenna base has two sides. Before you slide the antenna arm over the mounting bracket **C**, be sure the antenna arm and antenna base are in the correct orientation as shown.
3. When correctly oriented, slide the antenna arm over the mounting bracket **C** on the antenna base and align the screw holes in the mounting bracket with the screw hole in the antenna arm.
4. When the screw hole is aligned, re-insert screw **B** and snug it until it is tight.



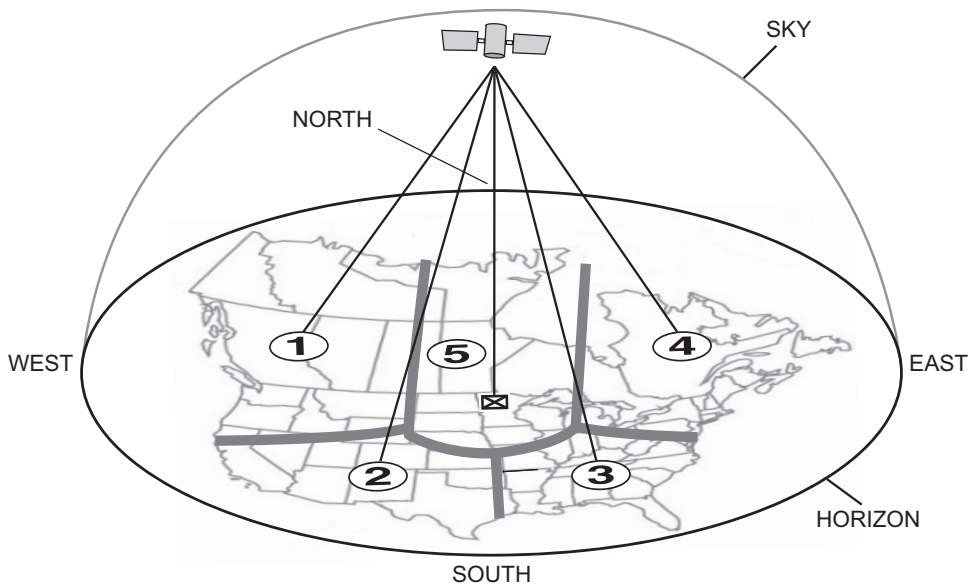
2. Determining a Location for the Antenna

For correct operation and best reception of the SIRIUS signal, it is important that the outdoor antenna is located in a place where it will have a clear view of the SIRIUS satellites in the sky. Obstructions such as bushes, trees, other homes or buildings, overhangs, soffits, chimneys, gables, dormers, etc., will impair or prevent the antenna from receiving a signal.

The best reception is obtained if the pod portion of the antenna (where the SIRIUS logo is printed) has a clear 360 degree view of the sky within the cone-shaped area shown in the following illustration.



If you cannot obtain a clear 360 degree view of the sky, then you must at least have a clear view of the sky in the direction of the SIRIUS satellites, as shown in the following map diagram.



Use the above map and find the area you are located in (1 to 5). Then find the direction in which you need to have a clear view of the sky:

Area 1: You will need a location with a clear view of the sky facing **EAST** or **NORTHEAST** or **SOUTHEAST**

Area 2: You will need a location with a clear view of the sky facing **NORTH** or **NORTHEAST**

Area 3: You will need a location with a clear view of the sky facing **NORTH** or **NORTHWEST**

Area 4: You will need a location with a clear view of the sky facing **WEST** or **NORTHWEST** or **SOUTHWEST**

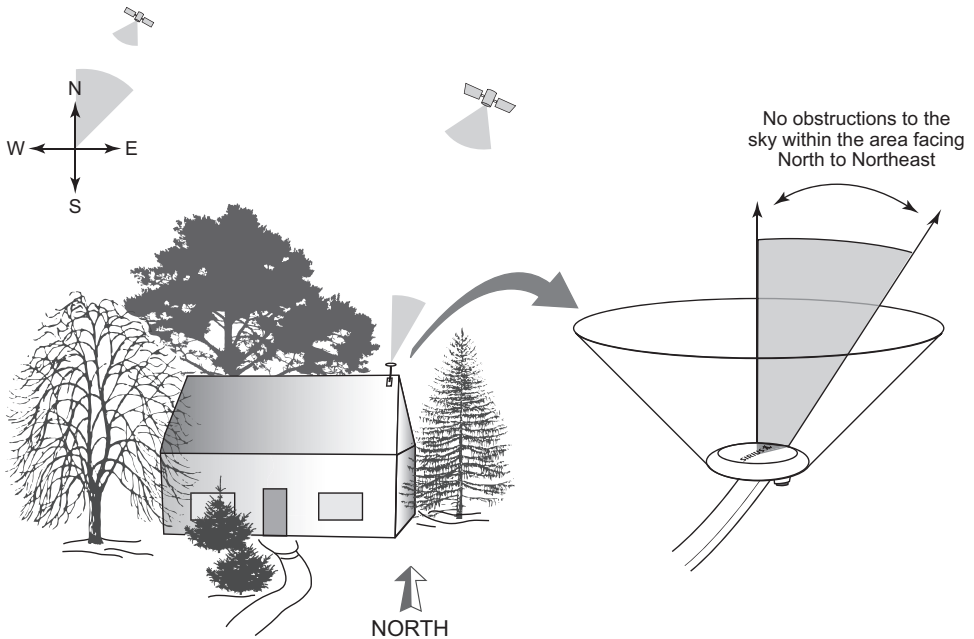
Area 5: You will need a clear view of the sky facing **STRAIGHT UP**

Choose a mounting location for the antenna which has an unobstructed view of

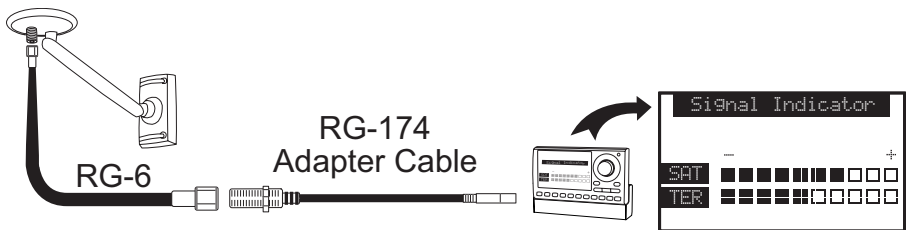
the sky in the direction for your area.

For example, suppose you live in **Area 2**. You determined that your antenna will need to have a clear view of the sky facing **North** or **Northeast**. The exact direction is determined by your specific location in **Area 2** relative to the **X** on the map: If you live in **Texas**, you will need a more **North** facing clear view of the sky whereas if you live in **southern California**, you will need a more **Northeast** facing clear view of the sky.

The following illustration shows a correct antenna installation for **Area 2**, with a clear view of the sky in the **North** to **Northeast** direction.



Once you have determined a possible mounting location for your area, it is recommended that you put the antenna in place temporarily and connect the antenna to your SIRIUS radio as shown in the following illustration. Using the Antenna Aiming or Signal Indicator feature of your radio, verify that your antenna is receiving a good SIRIUS signal. (Consult the user guide of the radio for specific instructions.)



3. Antenna Mounting Options

There are three possible mounting options for the outdoor antenna, and the antenna mounting location you have chosen may determine which mounting methods you can use:

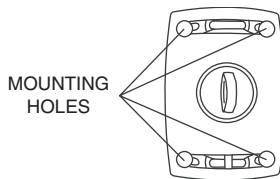
Wall Mount: Mounting the antenna directly on the side of a home or building.

Roof Mount: Mounting the antenna on the roof of a home or building.

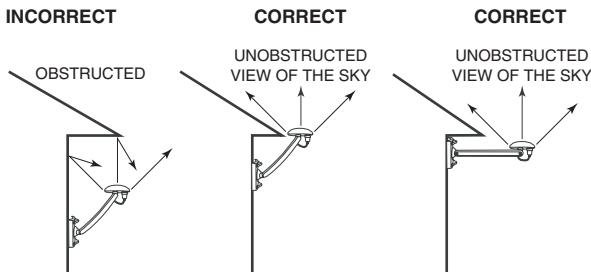
Mast Mount: Mounting the antenna on a mast or pole, such as an existing satellite TV dish mast, an existing TV antenna mast, or other mast or pole, not exceeding 2 inches in diameter.

Wall Mount

The antenna mounting bracket should be oriented in a vertical position (as shown) and mounted directly to the wall of the building or home using the provided #10 screws.



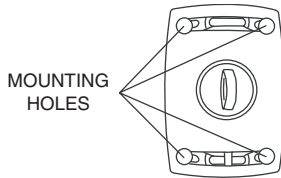
Remember to avoid blocking the antenna's view of the sky as described in the previous section by locating the antenna too high under the eaves or soffit of the home or building.



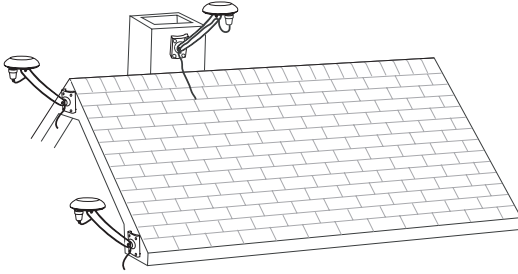
Once you have determined a suitable mounting location, use the mounting bracket as a template and mark the wall with the location of the four screw holes in the bracket. Then, using a 3/32 in. drill bit, drill pilot holes in the wall for the screws and then screw the bracket to the wall.

Roof Mount

When mounting the antenna on the roof of a home or building, mount the antenna as close as possible to the peak of the roof. It can be mounted on the chimney or on the soffit of the home or building. Do not mount it directly on the roof surface to avoid leaks. Remember to avoid blocking the antenna's view of the sky by locating it where a chimney, dormer, gable, etc., may obstruct the view of the sky.



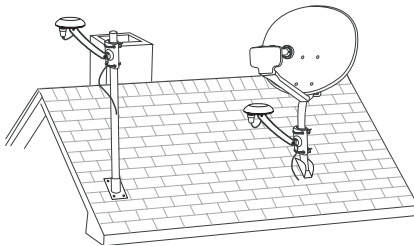
The antenna mounting bracket should be oriented in a vertical position as shown, and mounted directly to the building or home using the provided #10 screws.



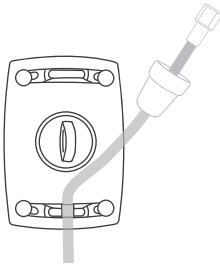
Once you have determined a suitable mounting location, use the mounting bracket as a template and mark the mounting surface with the location of the four screw holes in the mounting bracket. Then, using a 3/32 in. drill bit, drill pilot holes for the screws. It may be necessary to fill the holes with a small amount of roof cement or caulk to insure a watertight installation. Screw the bracket to the mounting surface using the provided #10 screws.

Mast Mount

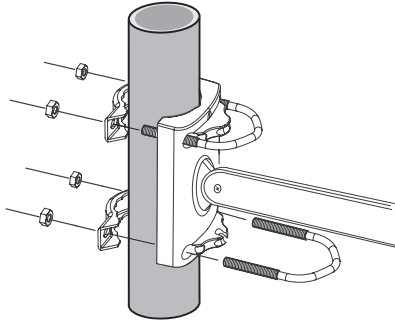
The outdoor antenna can be mounted on most any mast or pole which does not exceed 2 inches in diameter using the provided U-bolts and mounting brackets. If you have a satellite TV dish, the outdoor antenna may be mounted on the same mast as the satellite dish, but remember that the dish cannot obstruct the antenna's view of the sky in the direction which you determined from the map in the previous section.



To mount the antenna to the mast, you will need to use the two provided U-bolts, the two mounting brackets, and the four hex nuts. Keep in mind that the antenna cable is routed under the lower U-bolt, in the slot provided in the antenna base as shown.



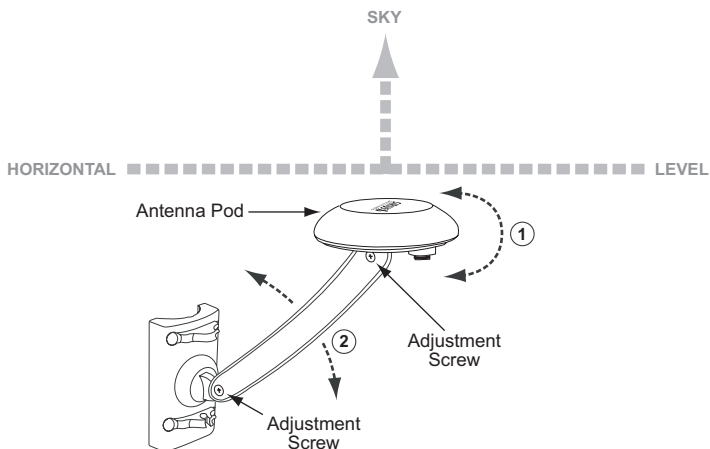
Slide one of the U-bolts through the holes at the top of the mounting bracket. Then slide one of the mounting brackets over the two legs of the U-bolt.



Next, screw the hex nuts on each leg until they are snug. Do not yet tighten the hex nuts beyond finger tight. Repeat this procedure with the other U-bolt. When all the hex nuts are snug, verify that the antenna is facing the correct direction and begin tightening each hex nut with a 3/8" wrench. Turn each hex nut one-half turn and then move to the next hex nut repeating this one-half turn pattern until all the hex nuts are equally tight. Tighten the hex nuts enough so that the antenna is secured to the mast or pole, but do not overtighten them.

4. Adjusting and Aiming the Antenna

The pod portion of the antenna (where the SIRIUS logo is printed) needs to be adjusted and aimed so that it is level and horizontal to the sky. There are two possible adjustments that may be made on the antenna to accomplish this: tilting the antenna pod itself (1), and adjusting the antenna support arm (2), as shown.



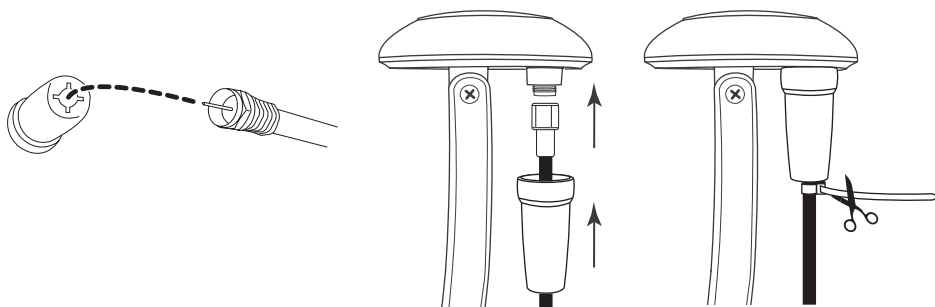
Slightly loosen the adjustment screws and position the antenna so that the top of the antenna pod is level, with the top of the pod horizontal to the sky as shown. When the antenna is adjusted correctly, tighten the adjustment screws but be careful not to overtighten them.

Continue with the next section for installations with exposed wiring, or the section following for installations with hidden wiring.

Cable and Diplexer Installation for Exposed Wiring

Once the antenna is mounted according to the previous instructions, you can continue with the cable and Diplexer portion of the installation:

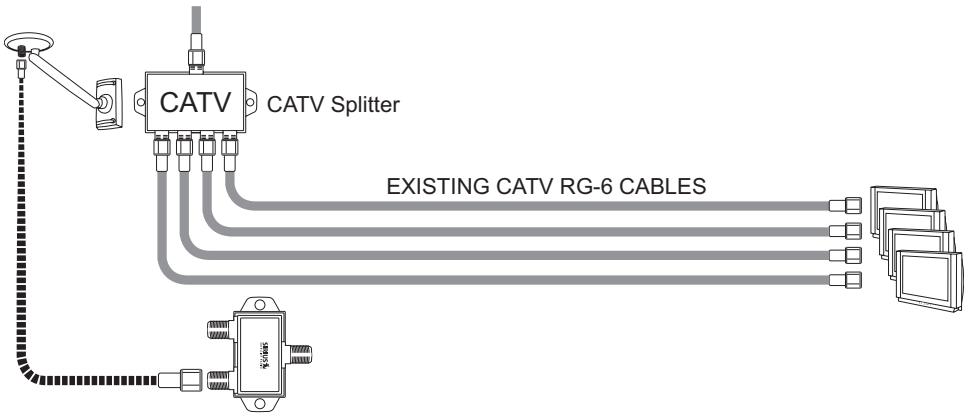
1. Take the RG-6 cable which you purchased to connect to the antenna and thread one end of the cable through the opening in the end of the rubber boot. Then connect the cable to the antenna pod as shown in the illustration following.
2. Slide the rubber boot over the cable connection to provide a weather proof seal and install the cable tie around the cable directly below the rubber boot to prevent the rubber boot from slipping down. Trim off the excess cable tie.



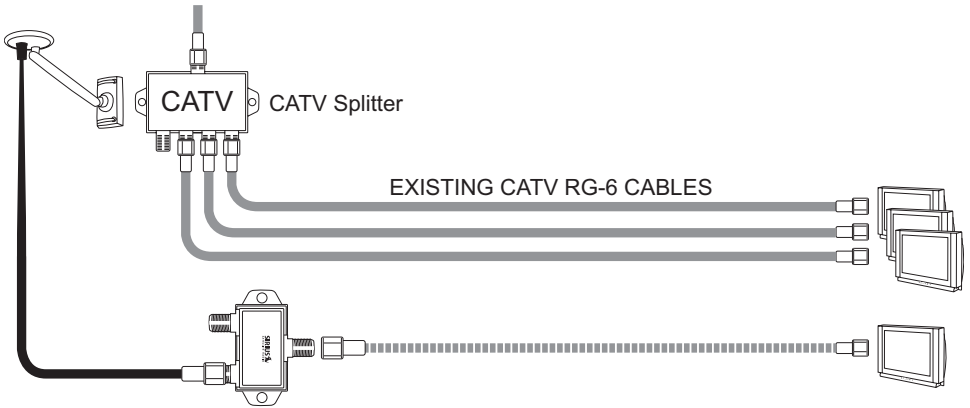
3. Route the remainder of the antenna cable into the home or building to where you are locating the first Diplexer. When routing the antenna cable, be care-

ful not to pinch, squash, kink, or crimp the cable, or cut, damage, or puncture the external jacket of the antenna cable.

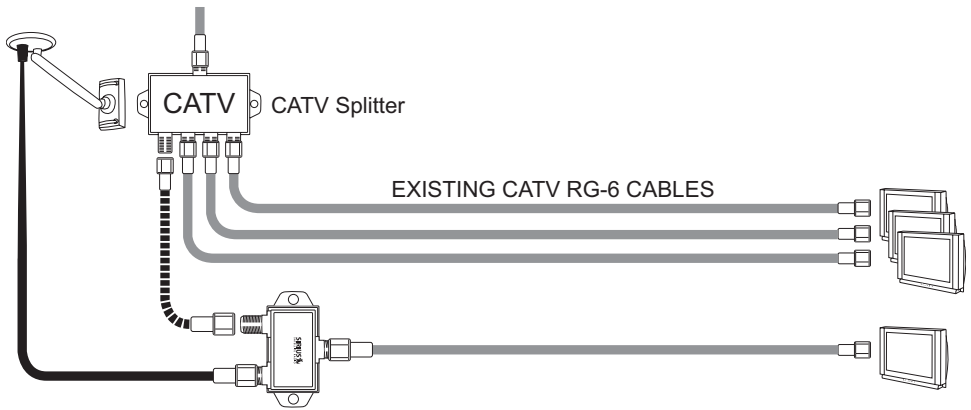
4. Connect the cable from the antenna to the **SIRIUS RADIO** port on the first Diplexer (SRD2) as shown. (Refer to page 3 for the Diplexer identification.)



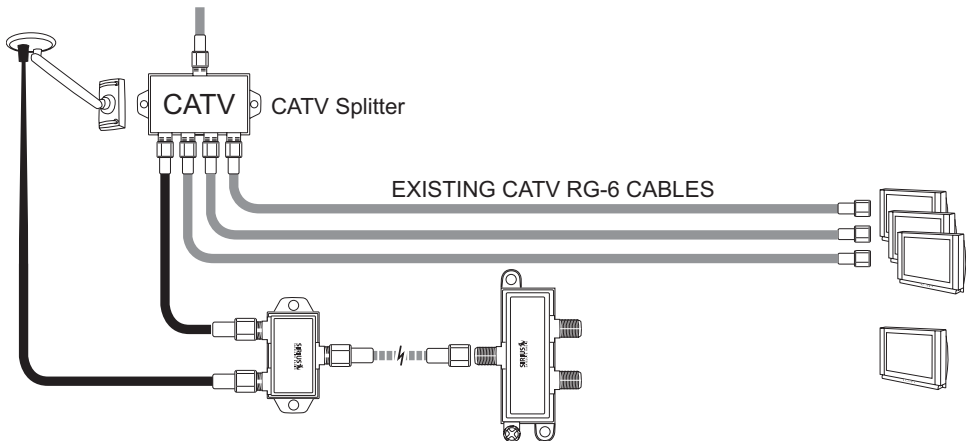
5. Identify the existing CATV cable run between the CATV splitter and TV that you intend to use as the cable to carry the SIRIUS signal. Disconnect the cable from the identified port on the CATV splitter and connect it to the **IN/OUT** port on the first Diplexer (SRD2) as shown. (Refer to page 3 for the Diplexer identification.)



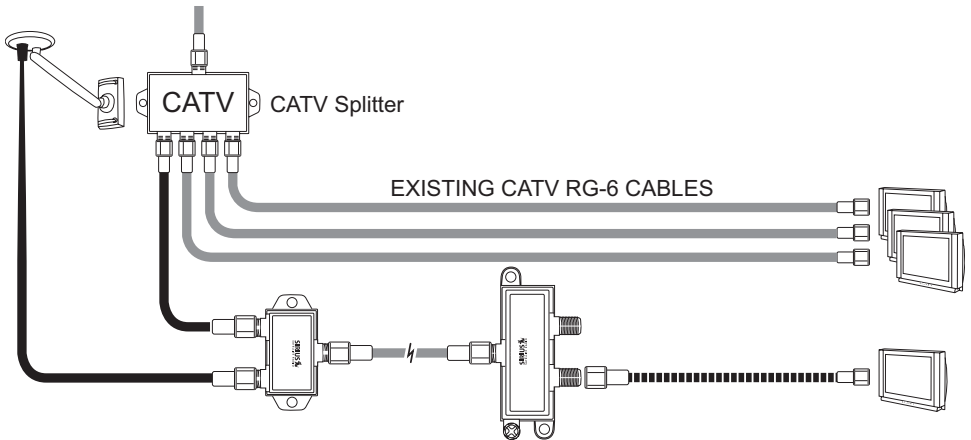
6. Using one of the RG-6 cables which you purchased, connect it between the **CATV** port on the first Diplexer (SRD2) and the identified port on the CATV splitter as shown. (Refer to page 3 for the Diplexer identification.)



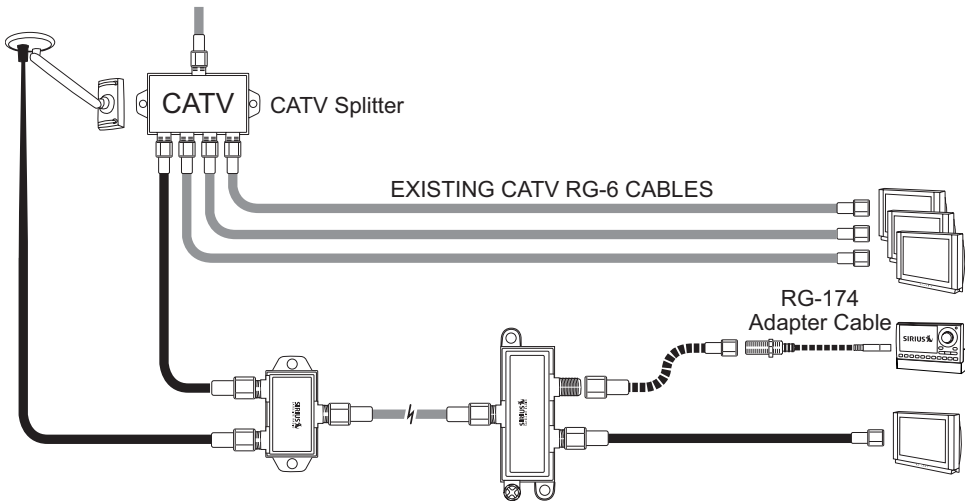
7. Disconnect the other end of the identified existing CATV cable run from the TV in the room where the SIRIUS radio will be located. Connect this end of the cable to the **IN/OUT** port on the second Diplexer (SRD-2VB) as shown. (Refer to page 3 for the Diplexer identification.)



8. Connect another of the RG-6 cables you purchased between your TV and the **CATV** port on the second Diplexer (SRD-2VB) as shown. (Refer to page 3 for the Diplexer identification.)



9. Connect another of RG-6 cables you purchased between the **SIRIUS RADIO** port on the second Diplexer (SRD-2VB) and the **F** connector end on the supplied RG-174 Adapter cable as shown. (Refer to page 3 for the Diplexer identification.) Connect the other end of the Adapter Cable to the **ANT** connection on your SIRIUS radio.

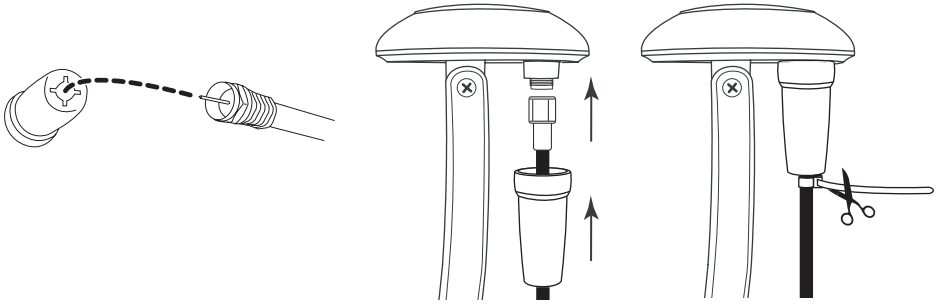


The installation of the Home Distribution Kit is now complete.

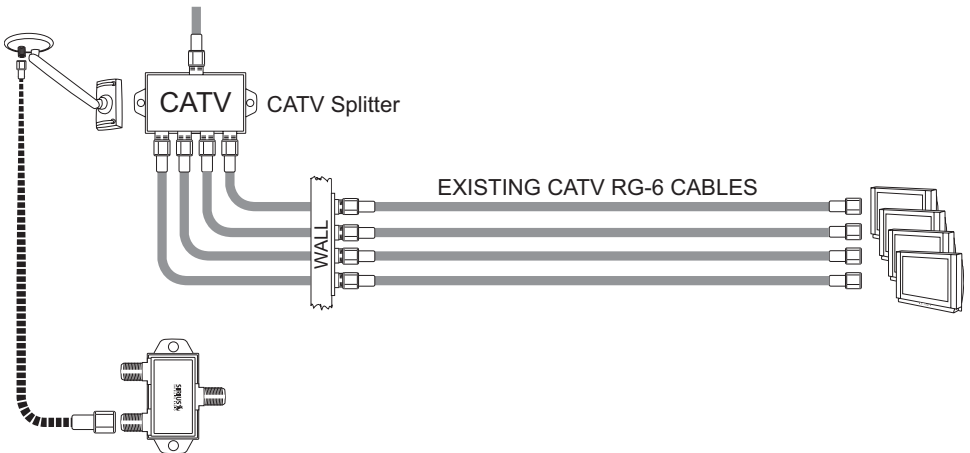
Cable and Diplexer Installation for Hidden Wiring

Once the antenna is mounted according to the previous instructions, you can continue with the cable and Diplexer portion of the installation:

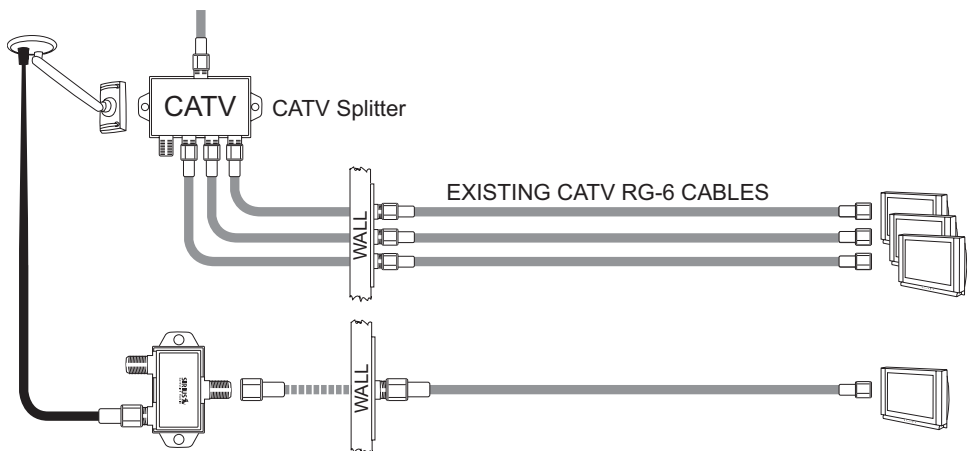
1. Take the RG-6 cable which you purchased to connect to the antenna and thread one end of the cable through the opening in the end of the rubber boot. Then connect the cable to the antenna pod as shown in the illustration following.
2. Slide the rubber boot over the cable connection to provide a weather proof seal and install the cable tie around the cable directly below the rubber boot to prevent the rubber boot from slipping down. Trim off the excess cable tie.



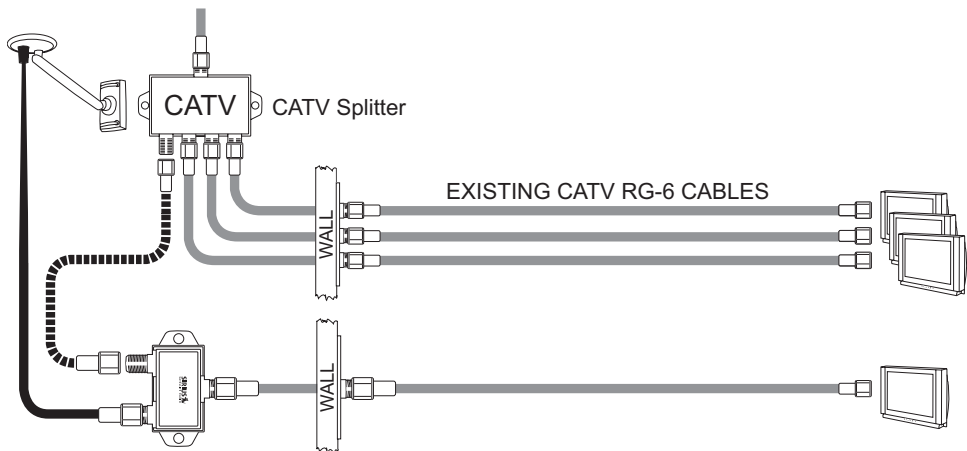
3. Route the remainder of the antenna cable into the home or building to where you are locating the first Diplexer. When routing the antenna cable, be careful not to pinch, squash, kink, or crimp the cable, or cut, damage, or puncture the external jacket of the antenna cable.
4. Connect the cable from the antenna to the **SIRIUS RADIO** port on the first Diplexer (SRD2) as shown. (Refer to page 3 for the Diplexer identification.)



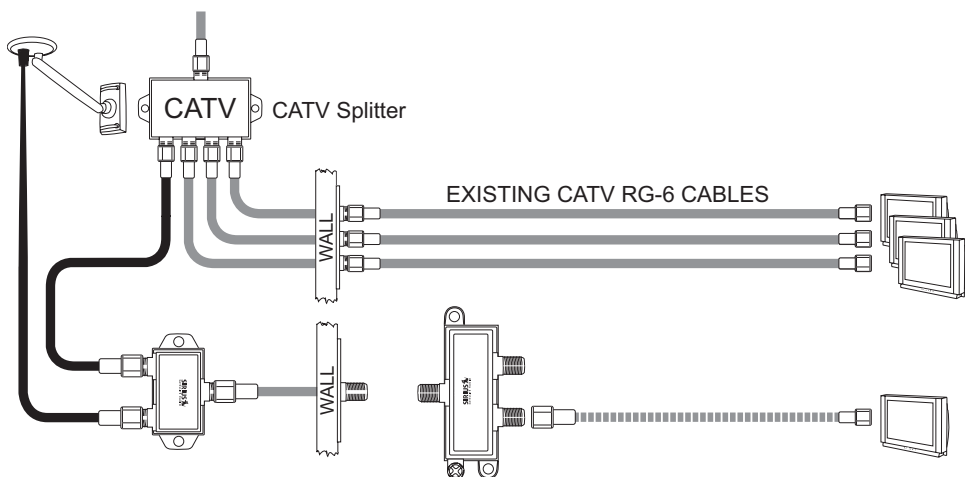
5. Identify the existing CATV cable run that you intend to use as the cable to carry the SIRIUS signal. This cable run leads to a CATV wall outlet in the room where the SIRIUS radio will be located. Disconnect the cable from the identified port on the CATV splitter and connect it to the **IN/OUT** port on the first Diplexer (SRD2) as shown. (Refer to page 3 for the Diplexer identification.)



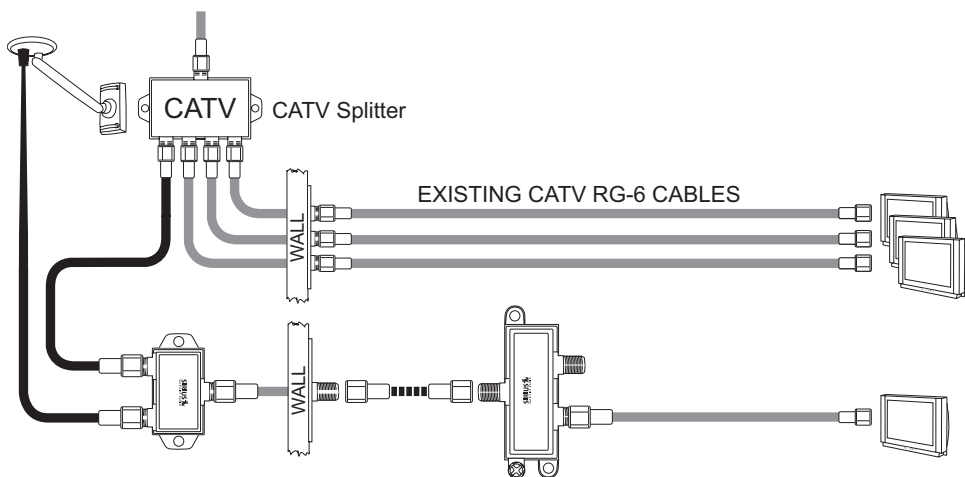
6. Use one of the RG-6 cables you purchased and connect it between the **CATV** port on the first Diplexer (SRD2) and the identified port on the CATV splitter as shown. (Refer to page 3 for the Diplexer identification.)



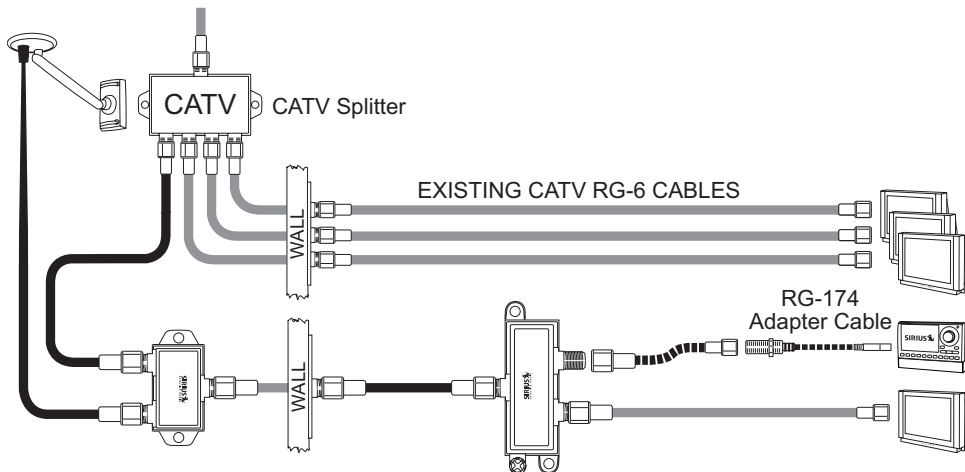
7. Disconnect the existing CATV cable run from the CATV wall outlet in the room where the SIRIUS radio will be located. Connect this end of the cable to the **CATV** port on the second Diplexer (SRD-2VB) as shown. (Refer to page 3 for the Diplexer identification.)



8. Connect another of the RG-6 cables you purchased between the CATV wall outlet and the **IN/OUT** port on the second Diplexer (SRD-2VB) as shown. (Refer to page 3 for the Diplexer identification.)



9. Connect another of RG-6 cables you purchased between the **SIRIUS RADIO** port on the second Diplexer (SRD-2VB) and the **F** connector end on the supplied RG-174 Adapter cable as shown. (Refer to page 3 for the Diplexer identification.) Connect the other end of the Adapter Cable to the **ANT** connection on your SIRIUS radio.



The installation of the Home Distribution Kit is now complete.

Troubleshooting

SIRIUS radio displays “Antenna Error” or “Check Antenna” message.

Check the antenna cable connections to be sure they are connected tightly.

SIRIUS radio displays “No Signal” or “Acquiring Signal” message.

The radio is not receiving a good SIRIUS signal. Check that the antenna has a clear view of the sky, and that the antenna is pointed in the direction of the SIRIUS satellites. (See the section titled, *Antenna Installation*.)

This message may also be an indication that your cable length has exceeded 150 ft., and that an in-line amplifier is required for your installation.

Antenna Specifications

Electrical Specifications

Frequency.....2320 to 2332.5 MHz

LNA Current Drain 160 mA, maximum

Mechanical Specifications

Radome Diameter 95mm

Arm Length..... 8 inches

Material..... AES

Antenna Connector..... “F” type, female

Weight 1.75 lbs.

Temperature Range..... -40°C to +85°C

Notes:



SIRIUS Satellite Radio
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New York, NY 10020
(888) 539-7474
www.sirius.com