

INSTALLING MY HOME ANTENNA

Find the optimum placement to receive the best reception.

At SIRIUS, our customers' satisfaction with the performance of their radios is extremely important to us.

In this section, we have prepared a series of tips for you to illustrate the best methods for installing your Sirius home antenna and properly connecting your SIRIUS satellite radio in your home or office.

There are two types of SIRIUS home antennas:

1. SIRIUS Indoor/Outdoor Home Antenna:



The Indoor/Outdoor Home Antenna is weatherproof, and can be placed either indoors or outdoors. It is provided with the SIRIUS home kits, with some SIRIUS radios, and with SIRIUS boom box kits. When correctly aimed and adjusted, this antenna will provide good signal reception for most home installations.

2. SIRIUS Outdoor Home Antenna:



The Outdoor Home Antenna must be mounted outdoors. It has an extension arm and pole-mount capability that provides more mounting and aiming options than the Indoor/Outdoor Antenna, giving you additional mounting flexibility for correct positioning and aiming, to maximize signal reception in difficult installations. The Outdoor Antenna can be purchased separately or as part of a home distribution kit.

Find Out Which Option Is Right For You

To receive the SIRIUS satellite signal consistently in your home (or office), you will need the right type of antenna mentioned above, depending on your home's particular location and surroundings. The antenna also needs to be mounted in the proper location and aimed in the proper direction.

Please click on either of the two links shown below, depending on where you live in the USA or Canada, to get step by step instructions on how to properly select, mount, position and aim your SIRIUS home antenna.

I live in the USA - how do I install my SIRIUS satellite home antenna
I live in Canada - how do I install my SIRIUS satellite home antenna

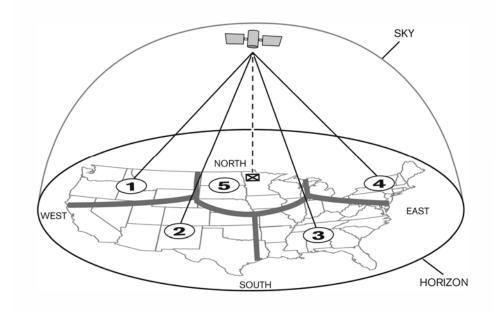
There are 4 easy steps in selecting and installing your SIRIUS home antenna if you live in the USA:

- Step 1: Find your area number on the location finder map for USA
- Step 2: Determine the general direction in which you need to aim the antenna
- Step 3: Determine what type of antenna you should use and where you should place or mount it
- Step 4: Properly place/mount, aim and connect your antenna

Step 1: Find Your Area Number on the Location Finder Map

Use the map below to find your location in the USA and the corresponding area number (1 to 5).

For example, if you live in Florida, you are in Area 3.



Location Finder Map for USA

Step 2: Determine the General Direction in Which You Need to Aim the Antenna

Use your Area number you determined from Step 1 and the chart below to determine in which direction your SIRIUS home antenna needs to be aimed:

AREA	ANTENNA AIMING DIRECTION
Area 1	Aim the antenna EAST or NORTHEAST
Area 2	Aim the antenna NORTH or NORTHEAST
Area 3	Aim the antenna NORTH or NORTHWEST
Area 4	Aim the antenna WEST or NORTHWEST
Area 5	Aim the antenna STRAIGHT UP at the sky (may require outdoor placement)

Example:

It will help to imagine that the SIRIUS satellites are in the sky above northern Minnesota. That's the optimal direction in which you need to aim your antenna.

So let's suppose you live in Area 2, per the location finder map shown in Step 1. You determined from the chart that your antenna will need to be aimed North or Northeast toward the X in the location finder map in northern Minnesota. 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 to aim in a more Northerly direction, whereas if you live in southern California, you will need to aim in a more Northeast direction.

Step 3: Determine What Type of Antenna You Should Use and Where You Should Place or Mount It

Determine what type of antenna you can use and where you need to place it after carefully reading through this section. Your antenna selection and mounting location should be based on your home's geographic location and surroundings.

There are four different options you can choose from:

- 1. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at Any Location
- 2. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at a Window
- 3. SIRIUS Indoor/Outdoor Home Antenna Placed Outdoors
- 4. SIRIUS Outdoor Home Antenna Mounted Outdoors

Which antenna should I choose - Indoor/Outdoor Home Antenna or Outdoor Home Antenna?

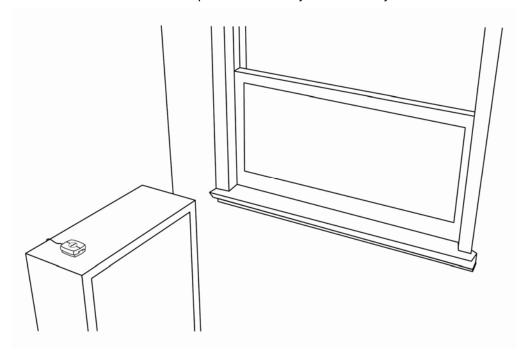
When correctly positioned, aimed and adjusted, the Indoor/Outdoor Home Antenna will provide good to excellent reception for most home installations. For installations where an Indoor/Outdoor Home Antenna does not provide adequate reception, the Outdoor Home Antenna should be used.

Please read through the following descriptions of each option to determine which antenna is suitable for you and where you should place or mount it:

Placement or mounting locations (shown in order of ease of installation):

1. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at Any Location

In addition to satellites, in <u>major metropolitan areas</u> SIRUIS also makes use of ground repeaters to broadcast the signal. In these areas it may be possible to receive the SIRIUS signal with the Indoor/Outdoor Home Antenna placed almost anywhere inside your home.



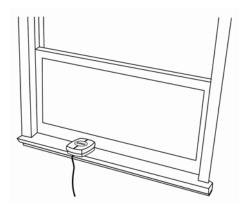
<u>Click here</u> to see a list of cities covered by SIRIUS ground repeaters. If you live with in the city limits or are in very close proximity to the city limits of one of the cities in the list, it is highly likely that you will be able to receive the SIRIUS signal with the indoor/outdoor antenna placed in a variety of locations inside of your home.

<u>Click here</u> for step-by-step installation instructions if you have determined that you will place the SIRIUS Indoor/Outdoor Home Antenna inside your home.

2. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at a Window

If there is a window in your house that has an <u>unobstructed</u> view of the sky in the general direction that you determined from Step 2, you can use the SIRIUS Indoor/Outdoor Home Antenna placed indoors on the windowsill of the window. An *unobstructed* view of the sky means:

- There should NOT be any blinds or curtains between the antenna and the glass window pane.
- There should NOT be any metal screens or bars on the window.
- There should NOT be any buildings, shrubs, trees, roof overhangs, or anything else obstructing the antenna's view of the sky in the direction you determined in Step 2.



<u>Click here</u> for step-by-step installation instructions if you have determined that you will place the SIRIUS Indoor/Outdoor Home Antenna indoors on a windowsill.

3. SIRIUS Indoor/Outdoor Home Antenna Placed Outdoors

In most parts of Area 5 or if you do not have a window in your home that has an unobstructed view of the sky in the general direction that you determined from Step 2, you will need to place the SIRIUS Indoor/Outdoor Home Antenna outdoors.

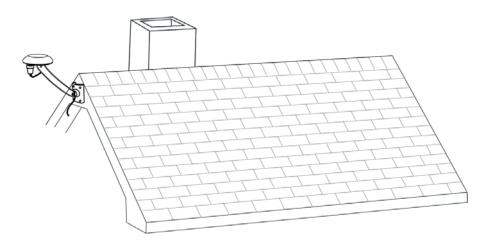
Keep in mind that even if the antenna is placed outdoors, it still needs to have an unobstructed view of the sky in the direction that you determined in Step 2. This means that there should NOT be any buildings, shrubs, trees, roof overhangs, or anything else obstructing the antenna's view of the sky in the direction that you determined in Step 2.



<u>Click here</u> for step-by-step installation instructions if you have determined that you need to place the SIRIUS Indoor/Outdoor Home Antenna outside.

4. SIRIUS Outdoor Home Antenna Mounted Outdoors

If you have problems receiving the SIRIUS signal using the Indoor/Outdoor Home Antenna, or if you want to maximize the possibility of receiving the SIRIUS signal, SIRIUS recommends you use the SIRIUS Outdoor Home Antenna. This antenna can be mounted outdoors on the roof, on an exterior wall, or on a mast or pole, and offers more placement and adjustment options.



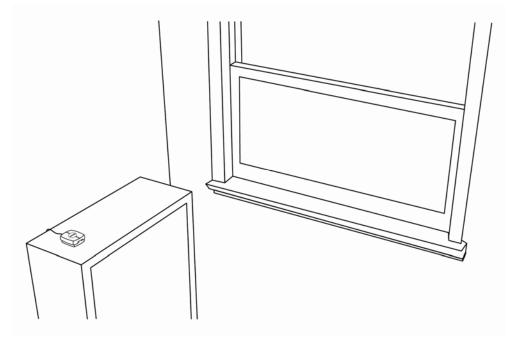
<u>Click here</u> for step-by-step installation instructions if you have determined that you will use the SIRIUS Outdoor Home antenna.

Step 4: Properly Place, Aim and Connect Your SIRIUS Indoor/Outdoor Antenna Placed Indoors at Any Location

Follow these step-by-step installation instructions:

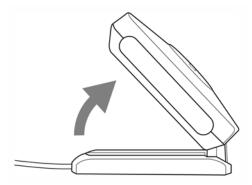
A) Place the Antenna

If you determined in Step 3 that you live in an area covered by one of SIRIUS' ground or terrestrial repeaters, place the antenna in a convenient location inside of your home.

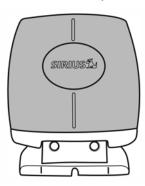


B) Aim the Antenna

1. Open the antenna clamshell so that it is halfway between the horizontal and vertical positions as shown below.

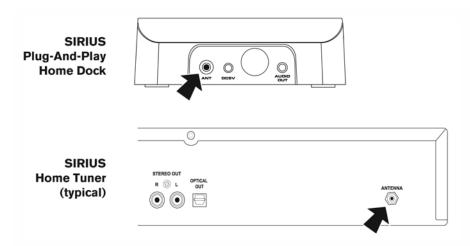


2. Aim the antenna so that the shaded surface shown below is facing a window. It should not face your SIRIUS radio.



C) Connect the Antenna to Your SIRIUS Radio or Home Dock

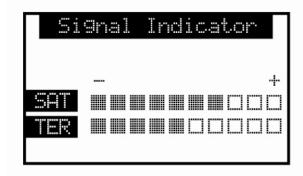
Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock:



If the cable attached to the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

D) Verify Signal Reception

Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)



The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available). The strength of the terrestrial signal may vary which is normal. Just confirm that you are always receiving a terrestrial signal.

NOTE: If you are not receiving a terrestrial signal, try moving the antenna to another location or room in your home. Make sure that the antenna surface shown above is facing a window in the new location.

If you are unable to receive the terrestrial signal after a few attempts, or if the signal is weak and the audio cuts in and out, the location of your house is most likely outside the coverage area of the SIRIUS ground repeaters. In that case, you need to choose one of the other options described in this guide.

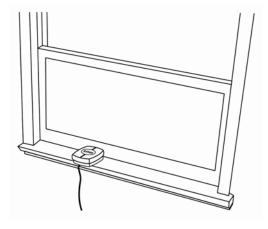
Step 4: Properly Place, Aim and Connect Your SIRIUS Indoor/Outdoor Antenna Placed Indoors at A Window

A) Place the Antenna

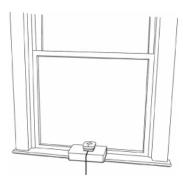
- 1. Find a suitable window in your home that faces in the general direction you determined in Step 2.
- This window needs to have a clear, unobstructed view of the sky in the direction determined in Step 2.
- There should NOT be any blinds or curtains between the antenna and the glass window pane.
- There should NOT be any metal screens or bars on the window.
- There should NOT be any buildings, shrubs, trees, roof overhangs, or anything else obstructing the antenna's view of the sky in the direction determined in Step 2 (see below).



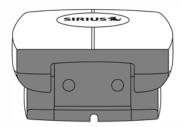
2. Place the antenna on the windowsill of a suitable window that faces the direction you determined in Step 2



Note: If placing the antenna on the windowsill results in the antenna directly facing the window's frame, place a book or other flat object under the antenna to prop the antenna up so that it is facing the glass window pane.

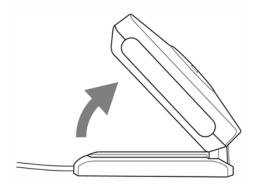


3. The surface of the antenna shown below in gray should be facing the window pane and should be pointed in the same direction you determined in Step 2.

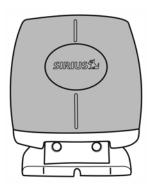


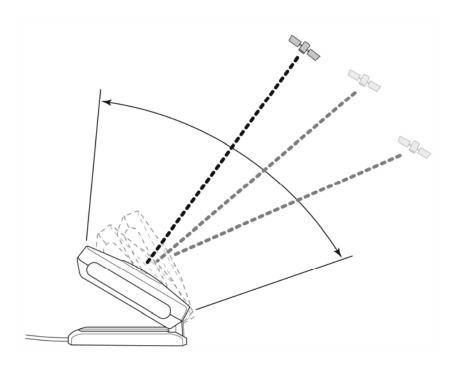
B) Aim the Antenna

1. Open the antenna clamshell so that it is halfway between the horizontal and vertical positions as shown below.



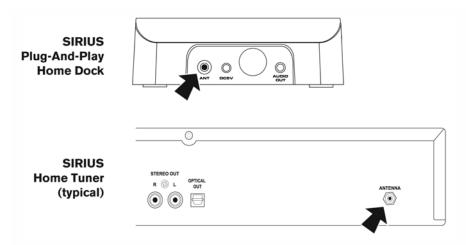
2. At this time, the shaded surface of the antenna shown below should be pointed in the direction of the SIRIUS satellites, which is the direction you determined in Step 2.





C) Connect the Antenna to Your SIRIUS Radio or Home Dock

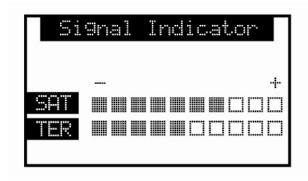
Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock:



If the cable attached to the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

D) Verify Signal Reception

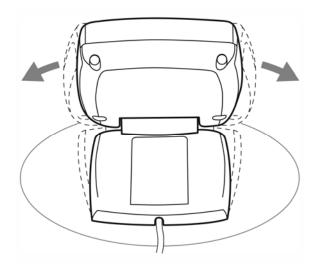
Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)



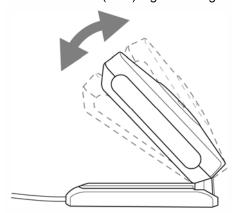
The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available).

E) Fine-Tune the Aim of the Antenna to Optimize Signal Reception

1. While watching the signal indicator screen, rotate the antenna left or right in *small* increments as shown below until the highest possible satellite (SAT) signal strength is achieved.



2. While watching the signal indicator screen, adjust the tilt angle in small increments toward the horizontal or vertical positions as shown below until the highest possible satellite (SAT) signal strength is achieved.

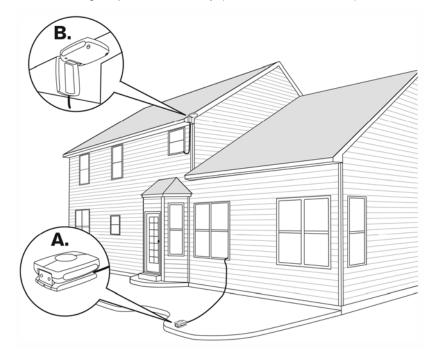


3. The SIRIUS satellites are not in a fixed place in space and move relative to the earth. As a result, the signal level at the antenna will vary throughout the day. Once you think you have aimed and pointed your antenna at the optimal direction, it is important to check that you are receiving an uninterrupted signal all the time. To ensure that you continuously receive the SIRIUS signal, we recommend that you observe your antenna set-up occasionally over the period of few hours and adjust the aim and tilt of the antenna as necessary.

Step 4: Properly Place, Aim and Connect Your SIRIUS Indoor/Outdoor Antenna Placed Outdoors

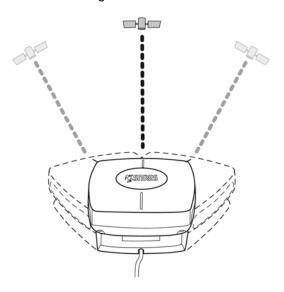
A) Place or Mount the Antenna

1. Place the SIRIUS Indoor/Outdoor Home Antenna outdoors on a flat surface with a clear unobstructed view of the sky straight up (**A**, in illustration below), or you can attach it to the house using the mounting points on the antenna's base with the antenna having a straight up view of the sky (**B**, in illustration below).



There should NOT be any obstructions such as bushes, trees, other homes or buildings, overhangs, soffits, chimneys, gables, dormers, etc, blocking the antenna's view of the sky in the direction you determined in Step 2.

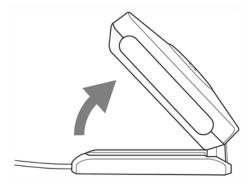
2. If you place the antenna outdoors on a flat surface, keep the clamshell closed and orient the body of the antenna to face the direction of the satellites that you determined in Step 2. Then go to Section B below that describes how to aim the antenna.



3. If you attach the antenna to the house using the mounting points on the antenna's base with the antenna having a straight up view of the sky, skip to Section C that describes how to connect the antenna to your SIRIUS radio or home dock.

B) Aim the Antenna

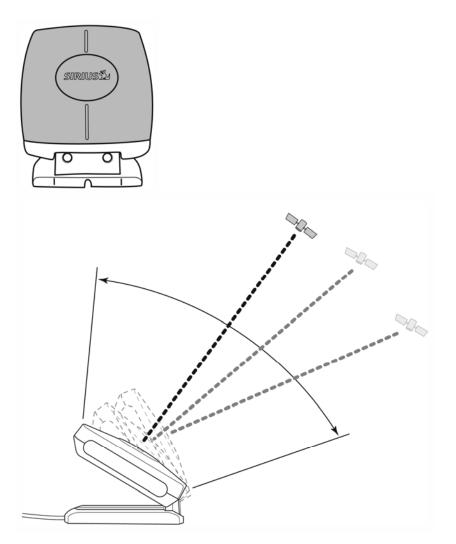
1. If you are in Areas 1 - 4 (as determined in Step 1), open the antenna clamshell so that it is halfway between the horizontal and vertical positions as shown below.



If you are in Area 5, the clamshell should remain closed.

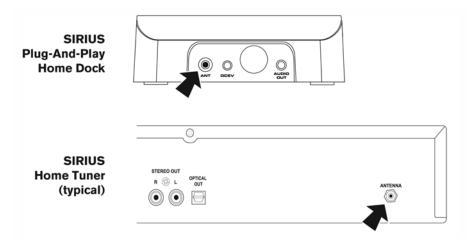
4. If you are in Areas 1 - 4, at this time, the shaded surface of the antenna shown below should be pointed in the direction of the SIRIUS satellites, which is the direction you determined in Step 2.

If you are in Area 5, the clamshell should remain closed, so the surface shown below in gray faces straight up.



C) Connect the Antenna to Your SIRIUS Radio or Home Dock

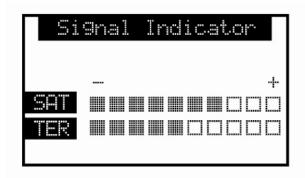
Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock:



If the cable attached to the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

D) Verify Signal Reception

Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)

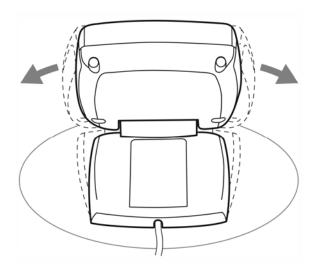


The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available).

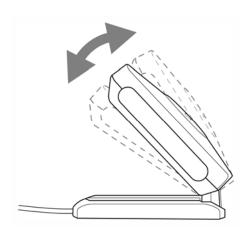
E) Fine-Tune the Aim of the Antenna to Optimize Signal Reception

1. While watching the signal indicator screen, rotate the antenna left or right in *small* increments as shown below until the highest possible satellite (SAT) signal strength is achieved.

Note: If you are in Area 5, the clamshell will remain closed.



2. If you are in Areas 1-4, while watching the signal indicator screen, adjust the tilt angle in small increments toward the horizontal or vertical positions as shown below until the highest possible satellite (SAT) signal strength is achieved.



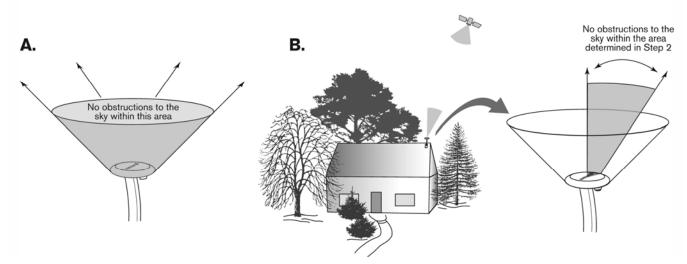
3. The SIRIUS satellites are not in a fixed place in space and move relative to the earth. As a result, the signal level at the antenna will vary throughout the day. Once you think you have aimed and pointed your antenna at the optimal direction, it is important to check that you are receiving an uninterrupted signal all the time. To ensure that you continuously receive the SIRIUS signal, we recommend that you observe your antenna set-up occasionally over the period of few hours and adjust the aim and tilt of the antenna as necessary.

Step 4: Properly Mount, Aim and Connect Your SIRIUS Outdoor Antenna

A) Mount the Antenna

1. Choose a mounting location for the antenna that has the best possibility of receiving the signal from SIRIUS satellites, in the direction determined in Step 2. There should be no obstructions such as bushes, trees, other homes or buildings, overhangs, soffits, chimneys, gables, dormers, etc, blocking the antenna's view of the sky.

An ideal mounting location would be one which has a clear view of the sky in all directions (**A**). If that is not possible, then you'll need a location with a clear view of the sky in the direction you determined in Step 2 (**B**).

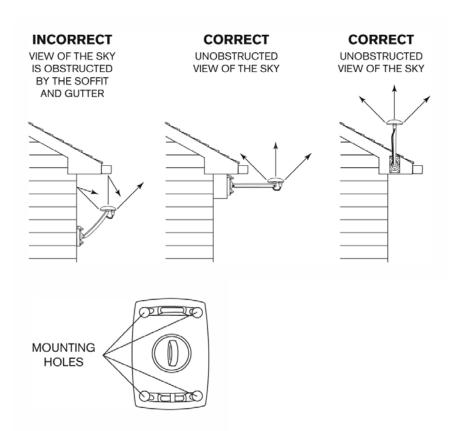


If you look closely at illustration B, you can see that the antenna does not have a clear view of the sky in all directions due to trees. However, it does have a clear view of the sky in the direction of the satellites. Your antenna will also need to have a clear view sky in the direction you determined in Step 2.

2. Mount the Outdoor Home Antenna on a wall, or on the roof of the house, or on a pole or satellite dish mast.

Wall Mounting

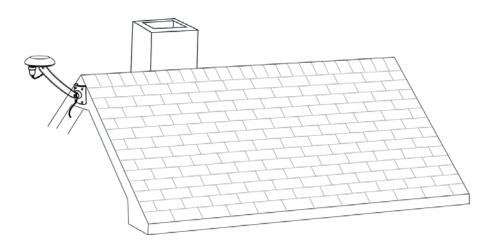
Use the provided screws to mount the base of the antenna to a wall on your home.

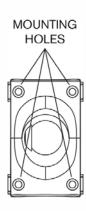


Roof Mounting

Use the provided screws to mount the base of the antenna to your home's roof.

Note: If you decide to choose this option, DO NOT mount the antenna such that it requires you to drill mounting holes through the shingles of your roof. Mount the antenna on an eave or soffit of the roof.

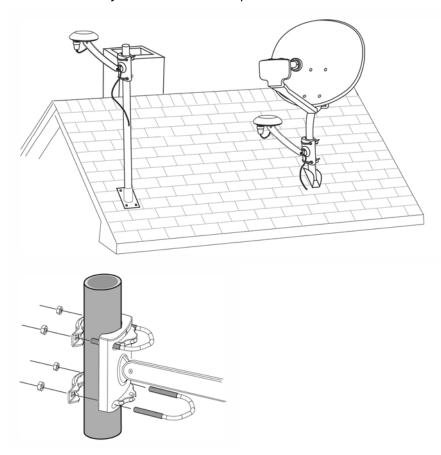




Pole Mounting

Use the provided U-bolt hardware to mount the base of the antenna to a pole or satellite antenna mast.

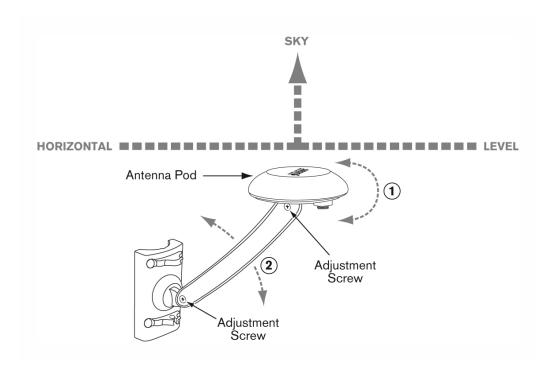
Note: When mounting the SIRIUS Outdoor Antenna to a satellite antenna mast be sure that the satellite antenna does not obstruct the SIRIUS antenna's view of the sky in the direction you determined in Step 2.



B) Adjust the Antenna

Adjust the antenna's pod (where the SIRIUS logo appears) so it is level and horizontal relative to the sky. The antenna has two adjustments to accomplish this:

- Tilting the angle of the pod itself (1)
- Adjusting the pod support arm (2)



C) Connect the Antenna to the SIRIUS Radio or Home Dock

SIRIUS offers two different outdoor antenna choices:

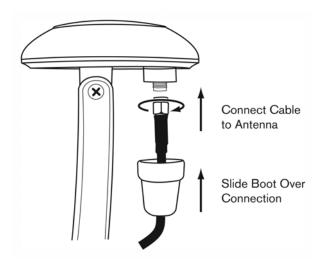
- One version is sold as a stand-alone product and comes with a 30-foot cable. The cable connects to the antenna on one end and to the SIRIUS radio or home dock on the other end.
- The other version is sold as part of the Home Signal Distribution Kits. It requires you to buy the appropriate lengths of RG-6 cable (same cable used in cable TV systems) for your particular installation. One end of the RG-6 cable connects to the SIRIUS antenna. The other end of the RG-6 cable connects to the Adapter Cable included in the Home Signal Distribution Kit. The other end of the Adapter Cable connects to your SIRIUS home tuner or home dock.

Follow the one of the two methods described below to connect the antenna to your SIRIUS home tuner or home dock depending on the type of outdoor home antenna you are using:

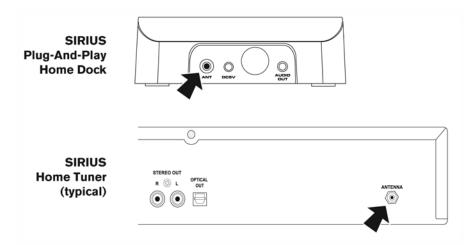
Connecting the stand alone outdoor antenna to your SIRIUS radio or home dock

Once you have determined a possible mounting location for the antenna, before permanently installing it at that place, you need to test whether you are receiving a good signal. Keeping the antenna orientation as intended, you will first temporarily install the provided cable between the antenna and your SIRIUS radio. Connect the included antenna cable to the antenna pod and slide the rubber boot over the connection to weatherproof it.

Note: The cable included with the antenna has two different connectors. The larger connector fits the antenna; the smaller connector fits your SIRIUS home tuner or home dock.



Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock.

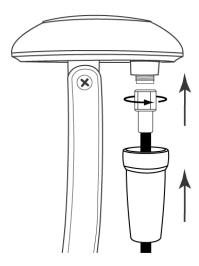


If the cable included with the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

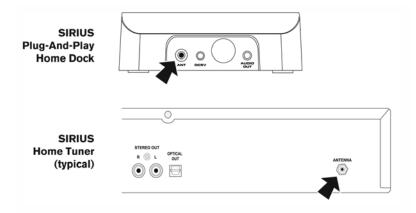
Connecting the antenna that comes with the Home Signal Distribution Kit to your SIRIUS radio or home dock

Note: Please review the installation instructions included with the Home Signal Distribution Kit you purchased thoroughly before connecting it to your SIRIUS home tuner or home dock. The instructions will contain information about the RG-6 cables you may need to purchase to complete the installation.

Once you have determined a possible mounting location for the antenna, before permanently installing it at that place, you need to test whether you are receiving a good signal. Keeping the antenna orientation as intended, you will first temporarily install a short length of RG-6 cable (less than 50 feet long) between the antenna and your SIRIUS radio. Using one of the RG-6 cables that you purchased, one which is less than 50 feet long, connect the cable to the antenna pod and slide the rubber boot over the connection to weatherproof it.

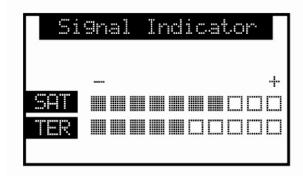


Route the cable to your SIRIUS home tuner or home dock and connect it to the RG-174 Adapter Cable. Connect the RG-174 Adapter Cable to the ANT connection on your SIRIUS home tuner or home dock.



D) Verify Signal Reception

Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)



The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available).

Note: If reception is weak, review the mounting location to be sure that the antenna pod has an unobstructed view of the sky in the direction of the satellites, and review the position of the antenna pod to be sure that it is horizontal relative to the sky.

One you have verified that the antenna is positioned correctly and receiving a good signal, follow the installation instructions which accompanied the home antenna product or distribution kit to complete the installation.

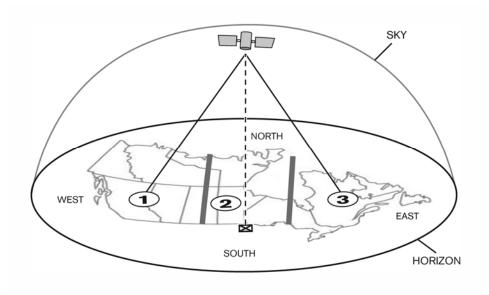
There are 4 easy steps in selecting and installing your SIRIUS home antenna if you live in the Canada:

- Step 1: Find your area number on the location finder map for Canada
- Step 2: Determine the general direction in which you need to aim the antenna
- Step 3: Determine what type of antenna you should use and where you should place or mount it
- Step 4: Properly place/mount, aim and connect your antenna

Step 1: Find Your Area Number on the Location Finder Map

Use the map below to find your location in Canada and the corresponding area number (1 to 3).

For example, if you live in British Columbia, you are in Area 1.



Location Finder Map for Canada

Step 2: Determine the General Direction in Which You Need to Aim the Antenna

Use your Area number you determined from Step 1 and the chart below to determine in which direction your SIRIUS home antenna needs to be aimed:

AREA	ANTENNA AIMING DIRECTION
Area 1	Aim the antenna EAST or SOUTHEAST
Area 2	Aim the antenna SOUTH or STRAIGHT UP at the sky (may require outdoor placement)
Area 3	Aim the antenna WEST or SOUTHWEST

Example:

It will help to imagine that the SIRIUS satellites are in the sky above northern Minnesota in the USA. That's the optimal direction in which you need to aim your antenna.

So let's suppose you live in Area 1. You determined from the chart that your antenna will need to be aimed South or Southeast toward the X in northern Minnesota. The exact direction is determined by your specific location in Area 1 relative to the X on the map: If you live in the Yukon Territory, you will need to aim in a more Southeast direction, whereas if you live in Vancouver, you will need to aim nearly due East.

Step 3: Determine What Type of Antenna You Should Use and Where You Should Place or Mount It

Determine what type of antenna you can use and where you need to place it after carefully reading through this section. Your antenna selection and mounting location should be based on your home's geographic location and surroundings.

There are four different options you can choose from:

- 1. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at Any Location
- 2. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at a Window
- 3. SIRIUS Indoor/Outdoor Home Antenna Placed Outdoors
- 4. SIRIUS Outdoor Home Antenna Mounted Outdoors

Which antenna should I choose - Indoor/Outdoor Home Antenna or Outdoor Home Antenna?

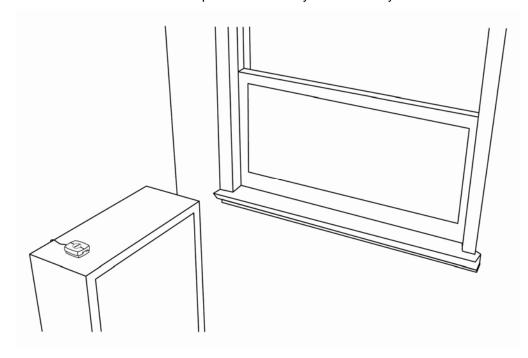
When correctly positioned, aimed and adjusted, the Indoor/Outdoor Home Antenna will provide good to excellent reception for most home installations. For installations where an Indoor/Outdoor Home Antenna does not provide adequate reception, the Outdoor Home Antenna should be used.

Please read through the following descriptions of each option to determine which antenna is suitable for you and where you should place or mount it:

Placement or mounting locations (shown in order of ease of installation):

1. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at Any Location

In addition to satellites, in <u>major metropolitan areas</u> SIRUIS also makes use of ground repeaters to broadcast the signal. In these areas it may be possible to receive the SIRIUS signal with the Indoor/Outdoor Home Antenna placed almost anywhere inside your home.



If you live in with in the city limits of one of the cities listed below, it is highly likely that you will be able to receive the SIRIUS signal with the indoor/outdoor antenna placed in a variety of locations inside of your home.

- Vancouver
- Calgary

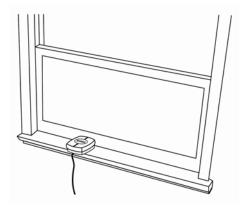
- Edmonton
- Winnipeg
- Hamilton
- Toronto
- Ottawa
- Montreal
- Quebec City

<u>Click here</u> for step-by-step installation instructions if you have determined that you will place the SIRIUS Indoor/Outdoor Home Antenna inside your home.

2. SIRIUS Indoor/Outdoor Home Antenna Placed Indoors at a Window

If there is a window in your house that has an <u>unobstructed</u> view of the sky in the general direction that you determined from Step 2, you can use the SIRIUS Indoor/Outdoor Home Antenna placed indoors on the windowsill of the window. An *unobstructed* view of the sky means:

- There should NOT be any blinds or curtains between the antenna and the glass window pane.
- There should NOT be any metal screens or bars on the window.
- There should NOT be any buildings, shrubs, trees, roof overhangs, or anything else obstructing the antenna's view of the sky in the direction you determined in Step 2.



<u>Click here</u> for step-by-step installation instructions if you have determined that you will place the SIRIUS Indoor/Outdoor Home Antenna indoors on a windowsill.

3. SIRIUS Indoor/Outdoor Home Antenna Placed Outdoors

In the southern part of Area 2 or if you do not have a window in your home that has an unobstructed view of the sky in the general direction that you determined from Step 2, you will need to place the SIRIUS Indoor/Outdoor Home Antenna outdoors.

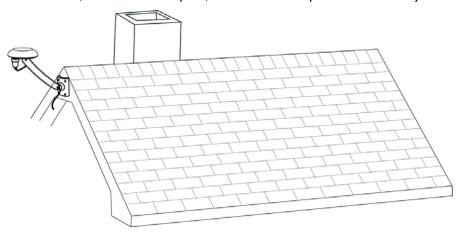
Keep in mind that even if the antenna is placed outdoors, it still needs to have an unobstructed view of the sky in the direction that you determined in Step 2. This means that there should NOT be any buildings, shrubs, trees, roof overhangs, or anything else obstructing the antenna's view of the sky in the direction that you determined in Step 2.



<u>Click here</u> for step-by-step installation instructions if you have determined that you need to place the SIRIUS Indoor/Outdoor Home Antenna outside.

4. SIRIUS Outdoor Home Antenna Mounted Outdoors

If you have problems receiving the SIRIUS signal using the Indoor/Outdoor Home Antenna, or if you want to maximize the possibility of receiving the SIRIUS signal, SIRIUS recommends you use the SIRIUS Outdoor Home Antenna. This antenna can be mounted outdoors on the roof, on an exterior wall, or on a mast or pole, and offers more placement and adjustment options.



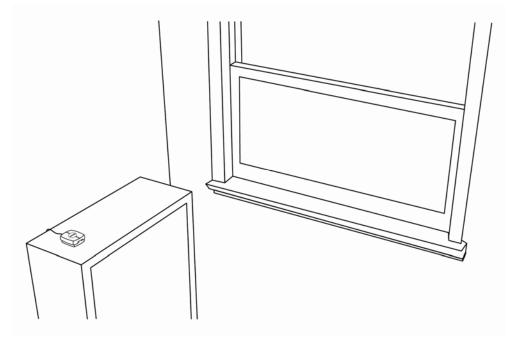
<u>Click here</u> for step-by-step installation instructions if you have determined that you will use the SIRIUS Outdoor Home antenna.

Step 4: Properly Place, Aim and Connect Your SIRIUS Indoor/Outdoor Antenna Placed Indoors at Any Location

Follow these step-by-step installation instructions:

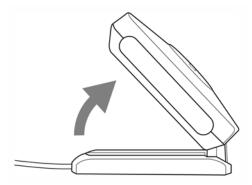
A) Place the Antenna

If you determined in Step 3 that you live in an area covered by one of SIRIUS' ground or terrestrial repeaters, place the antenna in a convenient location inside of your home.

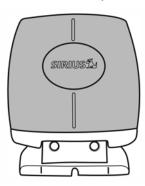


B) Aim the Antenna

1. Open the antenna clamshell so that it is halfway between the horizontal and vertical positions as shown below.

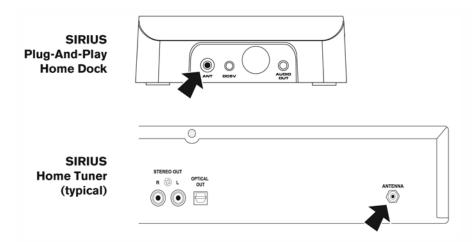


2. Aim the antenna so that the shaded surface shown below is facing a window. It should not face your SIRIUS radio.



C) Connect the Antenna to Your SIRIUS Radio or Home Dock

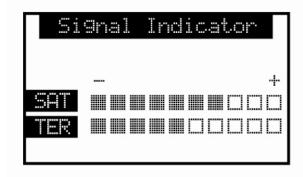
Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock:



If the cable attached to the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

D) Verify Signal Reception

Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)



The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available). The strength of the terrestrial signal may vary which is normal. Just confirm that you are always receiving a terrestrial signal.

NOTE: If you are not receiving a terrestrial signal, try moving the antenna to another location or room in your home. Make sure that the antenna surface shown above is facing a window in the new location.

If you are unable to receive the terrestrial signal after a few attempts, or if the signal is weak and the audio cuts in and out, the location of your house is most likely outside the coverage area of the SIRIUS ground repeaters. In that case, you need to choose one of the other options described in this guide.

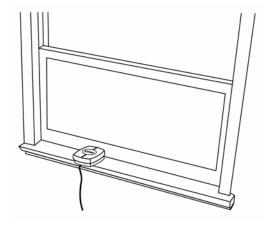
Step 4: Properly Place, Aim and Connect Your SIRIUS Indoor/Outdoor Antenna Placed Indoors at A Window

A) Place the Antenna

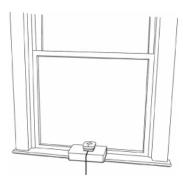
- 1. Find a suitable window in your home that faces in the general direction you determined in Step 2.
- This window needs to have a clear, unobstructed view of the sky in the direction determined in Step 2.
- There should NOT be any blinds or curtains between the antenna and the glass window pane.
- There should NOT be any metal screens or bars on the window.
- There should NOT be any buildings, shrubs, trees, roof overhangs, or anything else obstructing the antenna's view of the sky in the direction determined in Step 2 (see below).



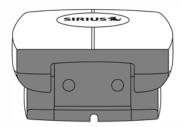
2. Place the antenna on the windowsill of a suitable window that faces the direction you determined in Step 2



Note: If placing the antenna on the windowsill results in the antenna directly facing the window's frame, place a book or other flat object under the antenna to prop the antenna up so that it is facing the glass window pane.

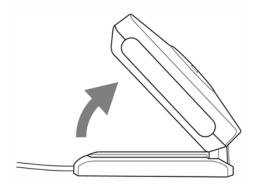


3. The surface of the antenna shown below in gray should be facing the window pane and should be pointed in the same direction you determined in Step 2.

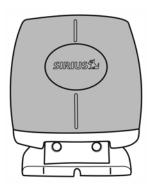


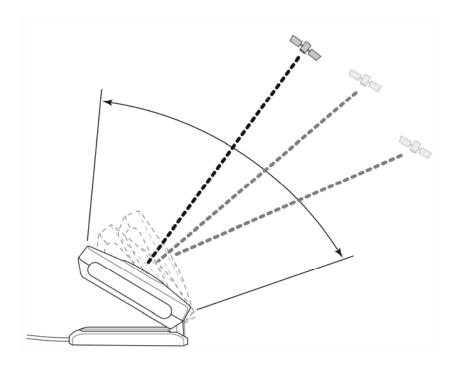
B) Aim the Antenna

1. Open the antenna clamshell so that it is halfway between the horizontal and vertical positions as shown below.



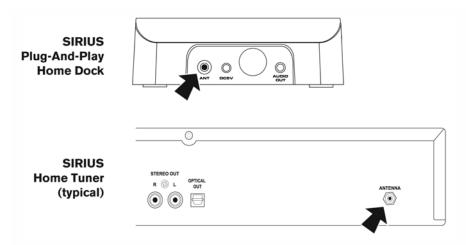
2. At this time, the shaded surface of the antenna shown below should be pointed in the direction of the SIRIUS satellites, which is the direction you determined in Step 2.





C) Connect the Antenna to Your SIRIUS Radio or Home

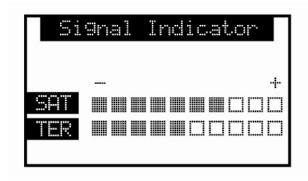
Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock:



If the cable attached to the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

D) Verify Signal Reception

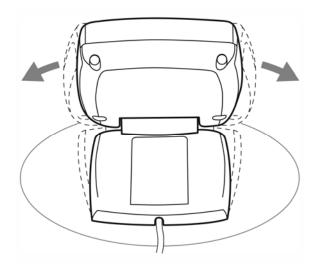
Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)



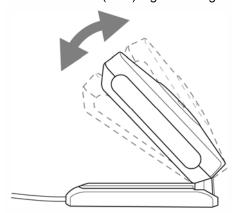
The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available).

E) Fine-Tune the Aim of the Antenna to Optimize Signal Reception

1. While watching the signal indicator screen, rotate the antenna left or right in *small* increments as shown below until the highest possible satellite (SAT) signal strength is achieved.



2. While watching the signal indicator screen, adjust the tilt angle in small increments toward the horizontal or vertical positions as shown below until the highest possible satellite (SAT) signal strength is achieved.

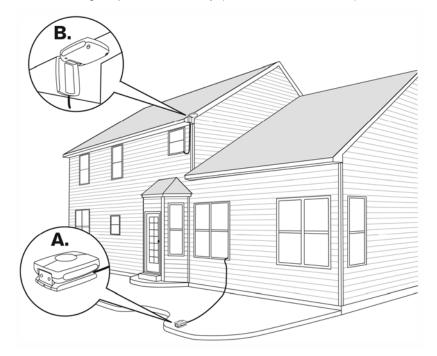


3. The SIRIUS satellites are not in a fixed place in space and move relative to the earth. As a result, the signal level at the antenna will vary throughout the day. Once you think you have aimed and pointed your antenna at the optimal direction, it is important to check that you are receiving an uninterrupted signal all the time. To ensure that you continuously receive the SIRIUS signal, we recommend that you observe your antenna set-up occasionally over the period of few hours and adjust the aim and tilt of the antenna as necessary.

Step 4: Properly Place, Aim and Connect Your SIRIUS Indoor/Outdoor Antenna Placed Outdoors

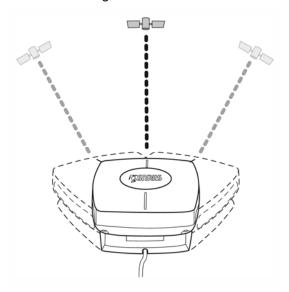
A) Place or Mount the Antenna

1. Place the SIRIUS Indoor/Outdoor Home Antenna outdoors on a flat surface with a clear unobstructed view of the sky straight up (**A**, in illustration below), or you can attach it to the house using the mounting points on the antenna's base with the antenna having a straight up view of the sky (**B**, in illustration below).



There should NOT be any obstructions such as bushes, trees, other homes or buildings, overhangs, soffits, chimneys, gables, dormers, etc, blocking the antenna's view of the sky in the direction you determined in Step 2.

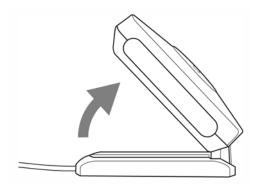
2. If you place the antenna outdoors on a flat surface, keep the clamshell closed and orient the body of the antenna to face the direction of the satellites that you determined in Step 2. Then go to Section B below that describes how to aim the antenna.



3. If you attach the antenna to the house using the mounting points on the antenna's base with the antenna having a straight up view of the sky, skip to Section C that describes how to connect the antenna to your SIRIUS radio or home dock.

B) Aim the Antenna

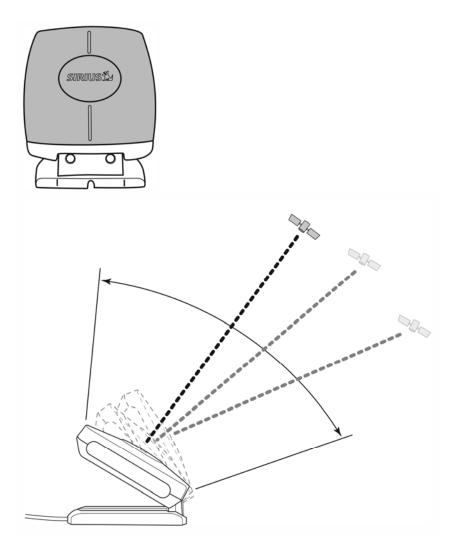
1. If you are in Area 1, northern part of Area 2, or Area 3 (as determined in Step 1), open the antenna clamshell so that it is halfway between the horizontal and vertical positions as shown below.



If you are in the southern part of Area 2, the clamshell should remain closed.

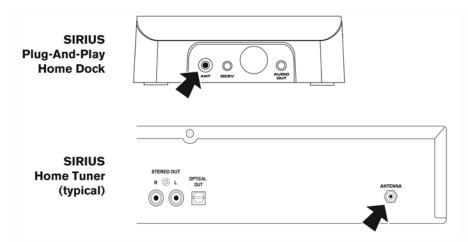
2. At this time, the shaded surface of the antenna shown below should be pointed in the direction of the SIRIUS satellites, which is the direction you determined in Step 2.

If you are in the southern part of Area 2, the clamshell should remain closed, so the surface shown below in gray faces straight up.



C) Connect the Antenna to Your SIRIUS Radio or Home

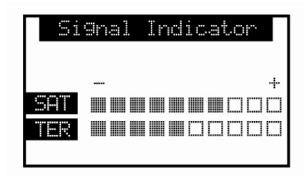
Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock:



If the cable attached to the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

D) Verify Signal Reception

Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)

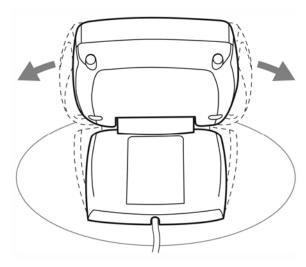


The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available).

E) Fine-Tune the Aim of the Antenna to Optimize Signal Reception

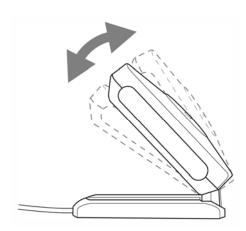
1. While watching the signal indicator screen, rotate the antenna left or right in *small* increments as shown below until the highest possible satellite (SAT) signal strength is achieved.

Note: If you are in southern part of Area 2, the clamshell will remain closed.



2. While watching the signal indicator screen, adjust the tilt angle in small increments toward the horizontal or vertical positions as shown below until the highest possible satellite (SAT) signal strength is achieved.

Note: If you are in southern part of Area 2, the clamshell will remain closed



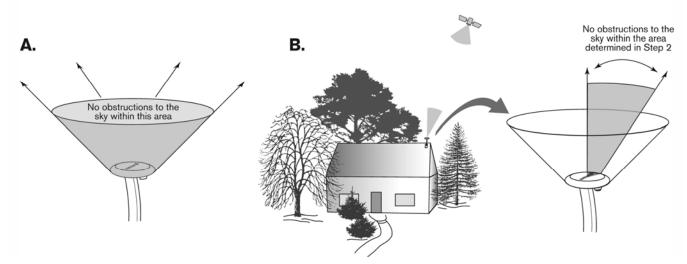
3. The SIRIUS satellites are not in a fixed place in space and move relative to the earth. As a result, the signal level at the antenna will vary throughout the day. Once you think you have aimed and pointed your antenna at the optimal direction, it is important to check that you are receiving an uninterrupted signal all the time. To ensure that you continuously receive the SIRIUS signal, we recommend that you observe your antenna set-up occasionally over the period of few hours and adjust the aim and tilt of the antenna as necessary.

Step 4: Properly Mount, Aim and Connect Your SIRIUS Outdoor Antenna

A) Mount the Antenna

1. Choose a mounting location for the antenna that has the best possibility of receiving the signal from SIRIUS satellites, in the direction determined in Step 2. There should be no obstructions such as bushes, trees, other homes or buildings, overhangs, soffits, chimneys, gables, dormers, etc, blocking the antenna's view of the sky.

An ideal mounting location would be one which has a clear view of the sky in all directions (**A**). If that is not possible, then you'll need a location with a clear view of the sky in the direction you determined in Step 2 (**B**).

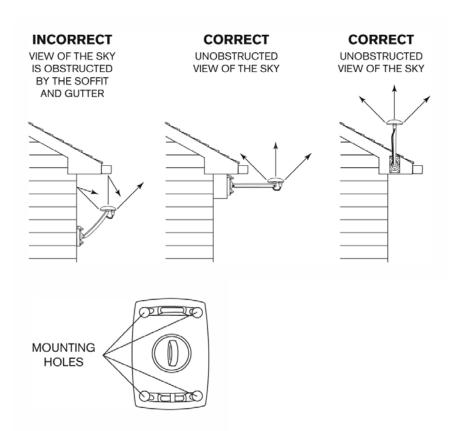


If you look closely at illustration B, you can see that the antenna does not have a clear view of the sky in all directions due to trees. However, it does have a clear view of the sky in the direction of the satellites. Your antenna will also need to have a clear view sky in the direction you determined in Step 2.

2. Mount the Outdoor Home Antenna on a wall, or on the roof of the house, or on a pole or satellite dish mast.

Wall Mounting

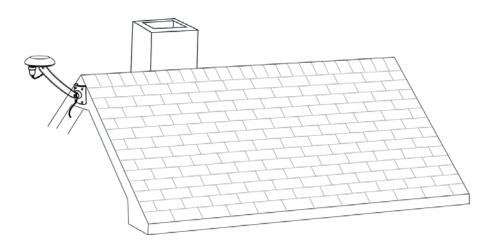
Use the provided screws to mount the base of the antenna to a wall on your home.

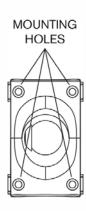


Roof Mounting

Use the provided screws to mount the base of the antenna to your home's roof.

Note: If you decide to choose this option, DO NOT mount the antenna such that it requires you to drill mounting holes through the shingles of your roof. Mount the antenna on an eave or soffit of the roof.

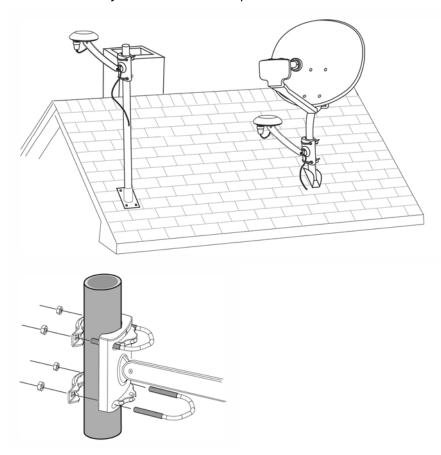




Pole Mounting

Use the provided U-bolt hardware to mount the base of the antenna to a pole or satellite antenna mast.

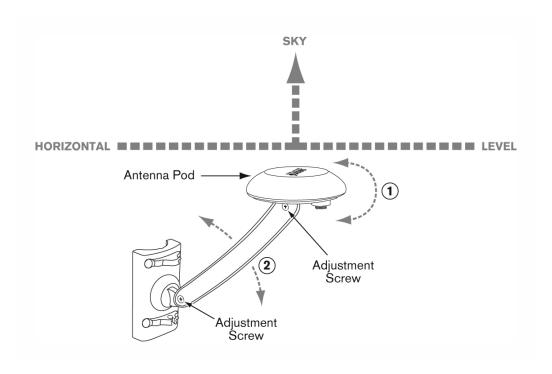
Note: When mounting the SIRIUS Outdoor Antenna to a satellite antenna mast be sure that the satellite antenna does not obstruct the SIRIUS antenna's view of the sky in the direction you determined in Step 2.



B) Adjust the Antenna

Adjust the antenna's pod (where the SIRIUS logo appears) so it is level and horizontal relative to the sky. The antenna has two adjustments to accomplish this:

- Tilting the angle of the pod itself (1)
- Adjusting the pod support arm (2)



C) Connect the Antenna to the SIRIUS Radio or Home Dock

SIRIUS offers two different outdoor antenna choices:

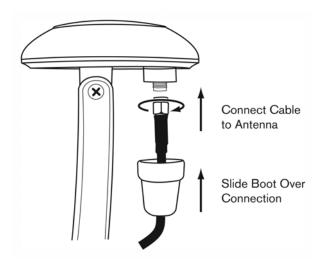
- One version is sold as a stand-alone product and comes with a 30-foot cable. The cable connects to the antenna on one end and to the SIRIUS radio or home dock on the other end.
- The other version is sold as part of the Home Signal Distribution Kits. It requires you to buy the appropriate lengths of RG-6 cable (same cable used in cable TV systems) for your particular installation. One end of the RG-6 cable connects to the SIRIUS antenna. The other end of the RG-6 cable connects to the Adapter Cable included in the Home Signal Distribution Kit. The other end of the Adapter Cable connects to your SIRIUS home tuner or home dock.

Follow the one of the two methods described below to connect the antenna to your SIRIUS home tuner or home dock depending on the type of outdoor home antenna you are using:

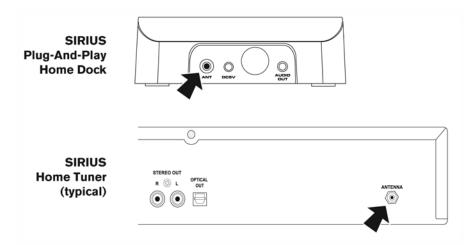
Connecting the stand alone outdoor antenna to your SIRIUS radio or home dock

Once you have determined a possible mounting location for the antenna, before permanently installing it at that place, you need to test whether you are receiving a good signal. Keeping the antenna orientation as intended, you will first temporarily install the provided cable between the antenna and your SIRIUS radio. Connect the included antenna cable to the antenna pod and slide the rubber boot over the connection to weatherproof it.

Note: The cable included with the antenna has two different connectors. The larger connector fits the antenna; the smaller connector fits your SIRIUS home tuner or home dock.



Route the antenna cable to your SIRIUS home tuner or home dock and connect it to the ANT connection on the tuner or dock.

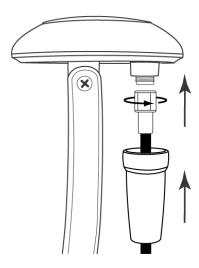


If the cable included with the antenna is not long enough, you can use a 50' long extension cable (sold separately) to extend the antenna cable. Click here to find out more about the 50' extension cable.

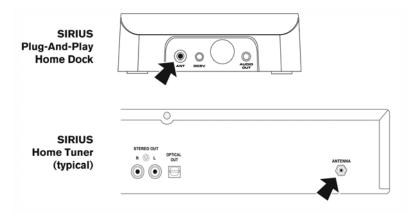
Connecting the antenna that comes with the Home Signal Distribution Kit to your SIRIUS radio or home dock

Note: Please review the installation instructions included with the Home Signal Distribution Kit you purchased thoroughly before connecting it to your SIRIUS home tuner or home dock. The instructions will contain information about the RG-6 cables you may need to purchase to complete the installation.

Once you have determined a possible mounting location for the antenna, before permanently installing it at that place, you need to test whether you are receiving a good signal. Keeping the antenna orientation as intended, you will first temporarily install a short length of RG-6 cable (less than 50 feet long) between the antenna and your SIRIUS radio. Using one of the RG-6 cables that you purchased, one which is less than 50 feet long, connect the cable to the antenna pod and slide the rubber boot over the connection to weatherproof it.

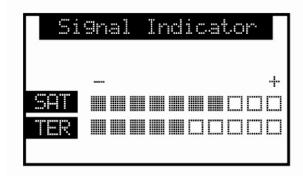


Route the cable to your SIRIUS home tuner or home dock and connect it to the RG-174 Adapter Cable. Connect the RG-174 Adapter Cable to the ANT connection on your SIRIUS home tuner or home dock.



D) Verify Signal Reception

Turn your SIRIUS radio ON and access the signal indicator (or antenna aiming) screen. (Consult your radio's manual for instructions on accessing the screen.)



The signal indicator screen shows the strength of both the satellite (SAT) signal and the terrestrial (TER) signal (if available).

Note: If reception is weak, review the mounting location to be sure that the antenna pod has an unobstructed view of the sky in the direction of the satellites, and review the position of the antenna pod to be sure that it is horizontal relative to the sky.

One you have verified that the antenna is positioned correctly and receiving a good signal, follow the installation instructions which accompanied the home antenna product or distribution kit to complete the installation.