Guide To Returning Your Satellite Modem and Radio Assembly

Model: HN9000

You must return the HughesNet modem with power supply and radio assembly to Hughes, in good condition, within 45 days of your service termination. You are not required to return, nor is Hughes obligated to either uninstall or pay for the removal of, the antenna, mount, or any of the associated cables.

You can either disconnect and remove the equipment yourself, or hire a professional installer to remove it.

**NOTICE**

Hughes recommends that you contact a professional installer to remove the equipment. You are liable for any damage you may cause to the equipment during removal.

**Safety while removing radio assembly**

Observe the following precautions when removing the satellite antenna radio assembly. This manual also includes additional safety alerts where appropriate concerning specific procedures.

**WARNING**

If the antenna is located on a roof, tower, or other high structure, or a ladder or scaffold is required to access the work site, Hughes recommends that you contact a professional installer to remove the radio assembly.

**DANGER**

If you work on a roof, tower, or other high structure, or use a ladder or scaffold to access the work site, follow these precautions to prevent personal injury or death:

- Walk only on sound roof structures.
- Use safety equipment (for example, a lifeline), appropriate for the work location.
- Follow all manufacturer safety precautions for all safety and other equipment used.

**DANGER**

- To avoid electric shock, stay at least 20 ft from power lines.
- If any part of the antenna or mount assembly comes in contact with a power line, call your local power company to remove it. *Do not try to remove it yourself.*

**WARNING**

Do not work in high wind or rain or if a storm, lightning, or other adverse weather conditions are either present or approaching.
Before you begin...

This document provides instructions on how to uninstall and return your equipment. You must:

- Disconnect and remove the satellite modem, following the instructions in Disconnecting the satellite modem on page 4.
- Disconnect and remove the radio assembly from the antenna, following the instructions in Removing the radio assembly on page 6.
- Pack and ship the equipment

What equipment do I return?

- The satellite modem with power supply shown in Figure 1.
- The radio assembly shown in Figure 2.

Satellite modem refers to the indoor unit (IDU). The satellite modem is connected to both your computer and the outside radio assembly. The radio assembly is part of the outside satellite antenna.

Note: You do not need to return small hardware such as nuts, bolts, washers, and screws.

Figure 1: Satellite modem and power supply

Figure 2: Radio assembly
Consider the antenna location
To remove the radio assembly, you must go outside to the satellite antenna. Depending on where the antenna is located, you may want to have a professional installer remove the satellite modem and radio assembly. For additional information, see If your antenna is on a roof or requires a ladder to access...

NOTICE
Hughes recommends that you contact a professional installer to remove the equipment. You are liable for any damage you may cause to the equipment during removal.

Packing materials
To pack the equipment for shipping you will need:

- A corrugated cardboard box, undamaged, with the following minimum dimensions:
  - Height: 12 inches
  - Width: 12 inches
  - Length: 24 inches

  Note: The dimensions given above are guidelines. For example, some boxes with a length shorter than 24 inches might be large enough, depending on the height and/or width of the box and the placement of the equipment in the box.

- Bubble wrap packing material (enough to nearly fill the box)
- Packing tape
- Shipping label

If you have questions...
If you have questions or need help, call Hughes Customer Care, toll-free, at 1-866-347-3292.
Disconnecting the satellite modem

You must disconnect the satellite modem before you remove the radio assembly.

**CAUTION**

You must completely disconnect the satellite modem before attempting to disconnect the radio assembly from the satellite antenna. Failure to do so could result in exposure to RF radiation, which could cause injury to the eyes or other injury.

1. Unplug the satellite modem AC power cord from the power outlet or surge protector.

**NOTICE**

Do not unplug the DC power cord from the satellite modem until after you have disconnected the AC power cord from the power outlet or surge protector.

2. Unplug the DC power cord from the rear panel of the satellite modem as shown in Figure 3.

![Figure 3: Disconnecting the power cord from the power source](image)
3. Disconnect the receive cable (SAT. in) from the satellite modem as illustrated in Figure 4. If the cable connector is warm, let it cool down before attempting to remove it.

![Figure 4: Disconnecting cables from the satellite modem](image)

4. Disconnect the transmit cable (SAT. out) from the satellite modem.
5. Disconnect the Ethernet cable from the satellite modem and from the computer.
Removing the radio assembly
This section contains instructions for disconnecting and removing the radio assembly from the outside satellite antenna.

If your antenna is on a roof or requires a ladder to access...
You can either disconnect and remove the radio assembly yourself, or have a professional installer remove it. If you remove the equipment yourself, you must be aware of the following safety information:

⚠️ WARNING
If the antenna is located on a roof, tower, or other high structure, Hughes recommends that you contact a professional installer to remove the radio assembly.

⚠️ DANGER
If you work on a roof, tower, or other high structure, or use a ladder or scaffold to access the work site, follow these precautions to prevent personal injury or death:
- Walk only on sound roof structures.
- Use safety equipment (for example, a lifeline), appropriate for the work location.
- Follow all manufacturer safety precautions for all safety and other equipment used.

⚠️ CAUTION
You must completely disconnect the satellite modem before attempting to disconnect the radio assembly from the satellite antenna. Failure to do so could result in exposure to RF radiation, which could cause injury to the eyes or other injury.

Before proceeding, make sure you have disconnected the Ethernet cable and satellite connections as explained in the previous section.

⚠️ CAUTION
You must completely disconnect the satellite modem before attempting to disconnect the radio assembly from the satellite antenna. Failure to do so could result in exposure to RF radiation, which could cause injury to the eyes or other injury.

Tools you will need
To disconnect and remove the radio assembly, you will need the following tools:

<table>
<thead>
<tr>
<th>Tools</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) 1/2-inch wrench</td>
<td>To remove the bolts from the radio assembly</td>
</tr>
<tr>
<td>Cable cutters</td>
<td>To cut the cables from the radio assembly</td>
</tr>
<tr>
<td>Optional tools:</td>
<td></td>
</tr>
<tr>
<td>7/16-inch wrench</td>
<td>If you plan to keep the cables and their connectors intact, use this wrench to disconnect the cable connectors from the radio assembly.</td>
</tr>
<tr>
<td>7/64-inch or 3mm Allen wrench</td>
<td>If you plan to keep the feed horn, use this wrench to disconnect the feed horn collar and feed horn from the radio assembly.</td>
</tr>
<tr>
<td>Electrical tape</td>
<td>If you plan to use the associated cables in the future, you will need electrical tape to seal the connectors at the antenna location (outside).</td>
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</tbody>
</table>
**Disconnecting the cables**

Figure 5 illustrates the cables that are attached to the radio assembly. Though antenna styles may vary, the cable configuration shown applies to all antenna types.

![Antenna with radio assembly connected](image)

Figure 5: Antenna with radio assembly connected
1. To remove the cables, use a cable cutter to cut the cables approximately one to two inches from the connectors attached to the radio assembly as shown in Figure 6.

2. Optional: If you choose to keep the cable connectors intact, first remove any existing weatherproofing tape, then use a 7/16-inch wrench to loosen both the receive and transmit cables from the radio as shown in Figure 7.

**NOTICE**
Hughes recommends that you do *not* attempt to disconnect the cables by unscrewing the connectors from the radio. Doing so can damage the radio connectors.
3. Optional: To preserve the cables for future use, wrap either the cut ends or the connectors tightly with electrical tape to keep moisture out.

**Detaching the radio assembly**

The radio assembly is attached to the feed support arm with two bolts. Figure 8 shows a typical configuration. However, for some antenna types, the feed horn is also secured to the feed support arm by way of an additional support bracket, as shown in Figure 9. For these antenna types, you will need to disconnect the bracket as well.

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**NOTICE**

When disconnecting the cable connectors, be careful not to twist the connectors on the radio assembly. Doing so will damage the radio connectors.
If your antenna’s feed horn is *not* attached to the feed support arm by way of a support bracket, refer to Figure 10 as you follow the removal procedure below.

1. Hold the radio assembly so it doesn’t fall while you remove the two bolts from the bottom of the feed support arm, using a ½-inch wrench.

![Figure 10: .74m antenna radio assembly and feed horn configuration](image)

2. Lift the entire radio assembly (including the feed horn) up and away from the feed support arm. It is not necessary for you to detach the feed horn from the radio assembly.

If, on your antenna, the feed horn is attached to the feed support arm, refer to Figure 11 as you follow the removal procedure outlined below.

![Figure 11: .74m antenna radio assembly and feed horn configuration](image)
1. Holding the radio assembly so it doesn’t fall, remove the three bolts indicated in Figure 11 from the bottom of the feed support arm using ½-inch wrench.
2. Lift the radio assembly (including the feed horn and feed horn support bracket) up and away from the feed support arm. It is not necessary for you to detach the feed horn from the radio assembly. You may discard the adapter brackets.

**NOTICE**

You are not required to return the feed horn. However, if you choose to disconnect it from the radio assembly, you could potentially damage the radio assembly. Hughes recommends that you return the radio assembly with the feed horn attached.

Optional: To remove the feed horn from the radio assembly:

1. Remove the two 3-mm Allen screws from the feed horn collar using a long-shaft hexagonal Allen wrench (7/64-inch) as shown in Figure 12.
2. As shown in the figure, loosen the collar, separate the two halves, and remove.

![Figure 12: Removing the feed horn collar](image)

3. Remove the feed horn from the radio assembly as shown in Figure 13.

![Figure 13: Removing the feed horn from the radio assembly](image)
Packing and shipping the equipment

Before you begin packing, make sure you have everything you need:

- The satellite modem with power supply
- The radio assembly
- Packing materials (see Packing materials for a complete list)

You can pack the equipment to be returned yourself, or you can hire a shipping or packing materials company to pack it for you. This section provides instructions for packing the equipment yourself. Even if you have someone pack the equipment for you, see the address and important instructions in Step 8.

When you pack the equipment for shipping, observe the following guidelines:

- Make sure the satellite modem and radio assembly are adequately protected with bubble wrap.
- Include enough bubble wrap and pack it tightly enough so parts do not touch or shift. Leave at least 2 inches of space filled with bubble wrap between all adjacent parts.

Packing the satellite modem

1. Place the box on a flat surface and cover the inside bottom of the box with at least 1 inch of bubble wrap.
2. Wrap the radio assembly in bubble wrap and lay it inside the box on the layer of bubble wrap. If necessary, lay the radio assembly diagonally to make it fit, as shown in Figure 14.

![Figure 14: Radio assembly wrapped in bubble wrap](image)

3. Add bubble wrap in the spaces to fill in any gaps between the radio assembly and the sides of the box.
4. Add 1 to 2 inches of bubble wrap over the radio assembly, keeping the bubble wrap as level as possible.
5. Wrap the satellite modem and power supply in bubble wrap and place them together inside the box, on top of the radio assembly. Lay the satellite modem on its side (so it takes up the least amount of space.) See Figure 15.

![Figure 15: Satellite modem wrapped in bubble wrap](image)

6. Fill the remainder of the box with bubble wrap, packing it tightly enough to keep the equipment from shifting while in transit.
7. Seal the box tightly with packing tape.

Note: Use only packing tape to seal the box.

*Important: For additional protection, Hughes highly recommends that you place the sealed carton inside a second, larger carton and use additional bubble wrap or similar filler between cartons to absorb any impact incurred during shipping.

8. Using a shipping label, clearly address the box to:

Hughes Network Systems, LLC
RMA #XXXXXXXXX [where XXXXXXXX = the RMA number.*]
Shipping Point 4004
16060 Industrial Drive
Gaithersburg, MD 20877

*Important: In place of RMA #XXXXXXXX, as shown above, you must include the return material authorization (RMA) number given to you by Hughes Customer Care either by phone, by e-mail, or your site account number (SAN). If you do not include this number, your package may be rejected, or the receipt of your hardware may be delayed. If you do not have an RMA number and do not remember your SAN, call Hughes Customer Care at 1-866-347-3292.
9. Place the shipping label on the broad side of the shipping box and take the box to a U.S. Post Office or a shipping company such as Federal Express or United Parcel Service (UPS).

Note: Hughes strongly recommends that you use a shipping service that provides a means to track the package, such as a tracking number.

Note: You may want to insure the contents of the package.

Note: The equipment to be returned weighs approximately 10 lb.

10. Optional: You can check the status of your returned equipment shipment by going to the Hughes Customer Care web site:

http://rmastatus.hughesnet.com