

START HERE!

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BEFORE YOU BEGIN...

This guide will help you set up your combination DirecPC/DSS® system. For best results, you also need to read the DirecPC *Getting Started* guide and *Antenna Installation Guide*, and the DSS owner's guide.



Warning

For your safety and protection, please read the safety instructions in section D of the *DirecPC Antenna Installation Guide*. If you purchased the DirecPC adapter and/or a DSS receiver, read the safety instructions on pages iii and iv of the *DirecPC Getting Started* guide and read the safety section in your DSS owner's guide.

The combination DirecPC/DSS system consists of three major components, namely the DirecPC adapter that goes into your computer, the DSS receiver that is installed onto your TV, and the satellite dish antenna that is installed in your backyard, on your roof, or on the building structure.

The combination system hardware—especially the antenna—should only be installed by someone who is experienced with such similar tasks as installing an 18-inch digital satellite system antenna, or standard TV antenna. Depending on how you intend to install the antenna you may be required to:

- Climb a ladder and work on your roof.
- Use a power drill to drill holes into your house.
- Determine whether there are water pipes, electrical wiring, or gas lines hidden in the walls near where you will be drilling.
- Route coaxial cable through the foundation wall, under floors, and through interior walls.
- Work near power lines.
- Ground the antenna and coaxial cable as recommended in National Electrical Code (published by the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269).

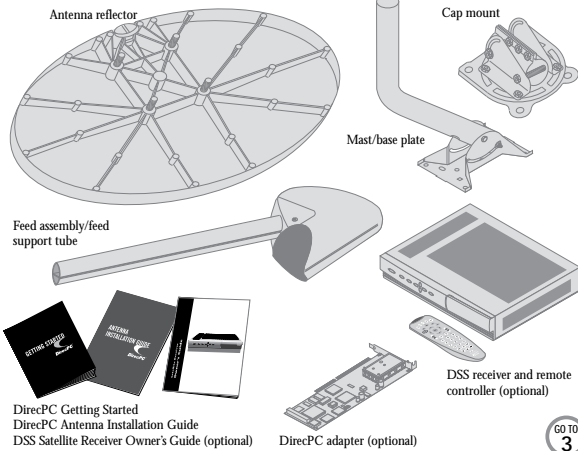
If you do not feel comfortable doing these tasks or complying with installation requirements (or, if you have never installed an antenna before), contact 1-800-DIRECPC for information on having your combination system installed by an authorized professional installer.

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UNPACK YOUR COMBINATION DIRECPC/DSS SYSTEM

The combination system contains the following items.



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Refer to the following to begin installing your DirecPC/DSS system:

- If you purchased the combination system with the DSS receiver and DirecPC adapter (or if you purchased just the DirecPC adapter), go to section "Install DirecPC adapter" below.
- If you purchased the combination system with just the DSS receiver, go to section "Install DSS Receiver" on panel 4 in this guide.

INSTALL DIRECPC ADAPTER

Note: If you are not an experienced PC user, and don't feel comfortable opening up your PC, please call 1-800-886-4947 to schedule a professional installation of your DirecPC adapter and the satellite dish antenna; for any other questions please call 1-800-DIRECPC.

Install the DirecPC adapter into an unused ISA or PCI slot. (See chapter 2, "Installing the DirecPC adapter," in *Getting Started* for the procedure.)

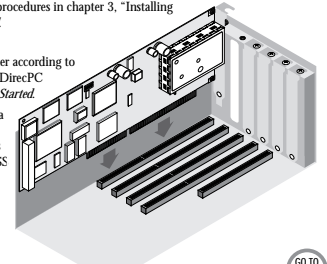
INSTALL DIRECPC SOFTWARE

Install the DirecPC software according to procedures in chapter 3, "Installing the DirecPC Navigator," in *Getting Started*.

CONFIGURE DIRECPC SOFTWARE

Configure the DirecPC software and adapter according to procedures in chapter 4, "Configuring the DirecPC software and DirecPC adapter," in *Getting Started*.

If your combination system does not have a DSS receiver, refer to section "Choose an antenna installation site" on panel 4 in this guide. Otherwise, refer to section "Install DSS Receiver" on panel 4 in this guide.

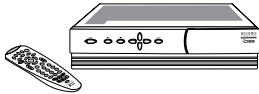


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INSTALL THE DSS RECEIVER

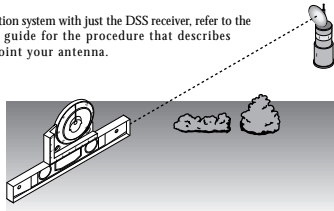
Install the DSS receiver and connect it to your television. (See the chapter in your DSS owner's guide that describes installing the DSS receiver and connecting it to your television, and installing batteries into the remote control.



CHOOSE AN ANTENNA INSTALLATION SITE

Use a compass, an angle finder or protractor, and a carpenter's level or straight edge to verify that there is an unobstructed line-of-sight toward the satellite. Refer to the following to select an installation site for your antenna:

- If you purchased the combination system with the DSS receiver and DirecPC adapter (or if you purchased only the DirecPC adapter), refer to the *DirecPC Antenna Installation Guide* for the procedure.
- If you purchased the combination system with just the DSS receiver, refer to the section in your DSS owner's guide for the procedure that describes how to decide where to point your antenna.

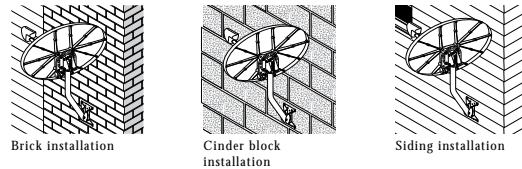


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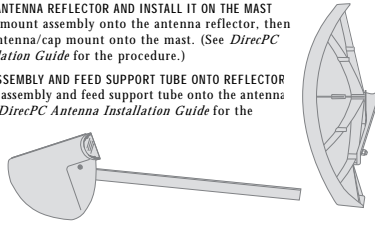
SELECT A MOUNTING OPTION

Install the antenna mast onto one of the recommended mounting surfaces. (See *DirecPC Antenna Installation Guide* for procedure.)



ASSEMBLE THE ANTENNA REFLECTOR AND INSTALL IT ON THE MAST
Install the cap mount assembly onto the antenna reflector, then assemble the antenna/cap mount onto the mast. (See *DirecPC Antenna Installation Guide* for the procedure.)

INSTALL FEED ASSEMBLY AND FEED SUPPORT TUBE ONTO REFLECTOR
Install the feed assembly and feed support tube onto the antenna reflector. (See *DirecPC Antenna Installation Guide* for the procedure.)



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GROUND THE ANTENNA BASE PLATE

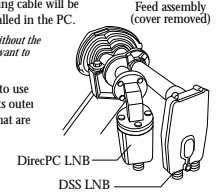
Ground the antenna base plate following the procedure in the *DirecPC Antenna Installation Guide*.

INSTALL THE COAXIAL CABLES

This section describes routing and installing three RG-6 coaxial cables between the low-noise blocks (LNBs) on the feed assembly and the grounding blocks. Two of the cables will be routed between the DSS LNB and the DSS receiver. The remaining cable will be routed between the DirecPC LNB and the DirecPC adapter installed in the PC.

Note: If you purchased the combination system without a DSS receiver or without the DirecPC adapter, you should still install all three coaxial cables in case you want to add the receiver or adapter later.

Depending on the routing of the coaxial cables, you may choose to use cables that can be buried. When normal coaxial cable is buried, its outer cover decays in the soil, and the cable's life is shortened. Cables that are suitable for burial use a special outer cover that resists breakdown. Some of these cables also have a special coating on their ground shields. This coating resists corrosion if water gets into the cable. Anytime the coaxial cable is buried, use cable that is suitable for burial. Doing so will help prevent problems in the future.



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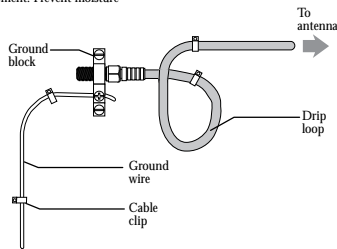
STEP-BY-STEP
INSTALLATION GUIDE

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An important goal of your cable installation is to protect the cables from physical damage and moisture penetration. To protect the cables from physical damage, secure them to walls or other stable surfaces with cable clips. This prevents the cables from sagging and being damaged by people stepping on them or running over them with yard equipment. Prevent moisture penetration by using weatherproof connectors, or by sealing any connection that is exposed to the elements. Drip loops provide a connection with additional protection by preventing moisture from traveling down the cables and entering the connections, as shown in the diagram at right.

Note: You will need two ground blocks one with a single port to ground the DirecPC coaxial cable, the other with two ports to ground the DSS cables.

1. Select the location where you will install the ground blocks. Choose a site that will be near to the cable entry point into the building. Also, plan a short and straight path for the ground wires to the grounding rod.



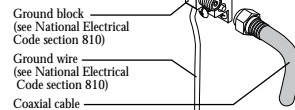
Warning
Verify before you drill that there are no wires or pipes near where you will be drilling.

2. Using four short lengths of masking tape or cellophane tape as labels, write *DSS* on the strips of tape and wrap each one around an end of a DSS cable. Label two more strips of tape *DIRECPC* and wrap those around the ends of the DirecPC cable.

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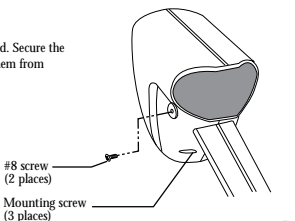
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3. Secure one of the ground blocks to a stable mounting surface with two screws, then connect one of the two coaxial cables that will connect between the DSS LNB and the DSS receiver to the grounding block (see diagram at right).
4. Install the second DSS LNB coaxial cable onto the ground block.
5. Install a second ground block near where you installed the first block.
6. Install the remaining coaxial cable (the DirecPC LNB cable) onto the ground block.
7. Secure the cables with cable clips. Do not forget to form the drip loops and secure them with cable clips.
8. Install the #8 ground wires on the ground terminal of each ground block.
9. Route the ground wires to the ground rod.
10. Connect the ground wires to the ground rod. Secure the wires to a wall or some surface to protect them from damage.



CONNECTING THE COAXIAL CABLES ONTO THE LNBs
Perform the following steps to install the coaxial cables onto the LNBs.

1. Using a Phillips-head screwdriver, remove the two #8 screws from the feed assembly cover (see diagram at right).



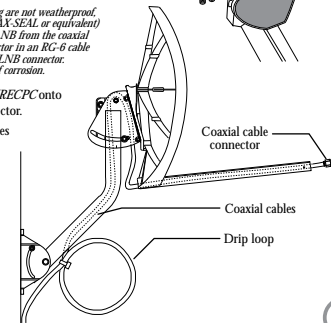
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2. Remove the three mounting screws.
3. Remove the feed assembly cover as shown at right.
4. Route the coaxial cables through the inside of the cable mast, and through the feed arm (see below right) until approximately 12 inches (30.5 cm) of cable extends from the top of the leg. Use cable ties to create a drip loop and secure the cables in place.
5. If the cables already have F-type connectors installed, go to step 6. Otherwise, follow the instructions that came with the F-type connectors you are using to install them onto the end of the cables.

Note: If the F-type connectors you are using are not weatherproof, you need to use a coaxial cable sealant (CAPI SEAL or equivalent) to prevent moisture from seeping into the LNB from the coaxial connectors. The copper-plated center conductor in an RG-6 cable can experience electrolytic corrosion at the LNB connector. Moisture and DC current cause this type of corrosion.

6. Install the coaxial cable labeled *DIRECPC* onto the DirecPC adapter LNB connector.
7. Install the remaining coaxial cables labeled *DSS* onto the DSS LNB connectors.
8. Install the feed assembly cover using the two #8 screws removed in step 1.
9. Install the three mounting screws



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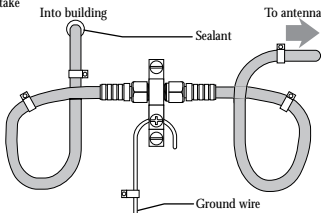
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ATTACHING THE DIRECPC LNB CABLE ONTO THE DIRECPC ADAPTER

During this step of the installation, route the DirecPC LNB cable from the ground block to the DirecPC adapter. If your Convergence product does not have a DirecPC adapter, coil the LNB cable and place it near the point of entry inside the building. In most installations, there is more than one way to get the LNB cable to the adapter from the grounding block. If the adapter is located near an inside wall, use the crawl, basement, or attic spaces. When routing the LNB cable to the adapter, take the shortest possible path and always protect it from physical damage.

Warning
Verify that there are no wires or pipes in the area of the hole where you plan to drill to enter the building.

1. After verifying that there are no wires or pipes blocking the location where you want to feed the coaxial cable into the building, drill a 3/4-inch hole.
2. Connect one end of the cable to the ground block (see diagram at right).
3. Form a 3-inch to 5-inch drip loop in the cable before inserting it in the access hole.
4. Secure the drip loop and cable to the wall with cable clips.
5. Inside the building, route the cable to the computer. Depending on the installation site, this could be through a floor or wall, directly to the rear of the computer. If the cable goes straight through a wall, you can use a wall plate at the access point.
6. Install the cable onto the adapter cable connector.



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ATTACHING THE DSS LNB CABLES ONTO THE DSS RECEIVER

During this step of the installation, route the DSS LNB cables from the dual-port ground block to the DSS receiver. If your combination system does not have a DSS receiver, seal the access point into the building with silicone sealant, then coil the LNB cables and place them near the point of entry inside the building.

1. Connect the cables to the ground block.
2. Form 3-inch to 5-inch drip loops in the cables before inserting them in the access hole. Secure the drip loops and cables to the wall with cable clips.
3. Inside the building, route the cables to where the DSS receiver is installed.
4. Seal the access point into the building with silicone sealant.

AIMING THE ANTENNA

The antenna and cables are now completely installed. Refer to the following to aim your antenna:

- If you purchased the combination system with the DSS receiver and DirecPC adapter (or if you purchased only the DirecPC adapter), refer to the *DirecPC Antenna Installation Guide* to aim your antenna.
- *Note: If you have both a DirecPC adapter and a DSS receiver, you can aim the antenna using either device. This is because the combined DirecPC/DSS LNBs on the antenna feed assembly are designed so that if you aim the antenna at one satellite (for example, the DirecPC satellite), the antenna is automatically aimed at the DSS satellites as well.*
- If you purchased the combination system with only the DSS receiver, first refer to the *DirecPC Antenna Installation Guide* to begin aiming your antenna. When you reach the part of the procedure that requires using a signal strength meter to measure how strong a signal you are receiving from the satellites, refer to the section in your DSS owner's manual that describes aligning the antenna so you can view the DSS receiver's signal strength screen on your television. Adjust the antenna until you achieve the signal strength reading recommended by your DSS owner's manual, then refer to the *DirecPC Antenna Installation Guide* to finish the aiming procedure.

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Congratulations! Installation is complete. Do the following to begin using your combination DirecPC/DSS system:

- If you want to begin using the DirecPC service, refer to chapter 6, "Using the DirecPC Navigator," in *Getting Started*.
- If you want to begin using your DSS, you must first authorize your service. To arrange to receive your DSS programming, contact USSB® at 1-800-204-USSB (8772) and DIRECTV® at 1-800-DIRECTV (347-3288). Then refer to the DSS owner's guide to finish connecting the DSS receiver to a TV or VCR.

FCC IDs: K3YHNS9200-1 and K3Y-IRD-1

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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Document # 1024356-0001 Rev. A