Incorrect information on connecting Eastern Arc (61.5, 72.7, 77) satellites to a DPP44 appears on page 6. According to DISH, this information will be removed in a future version of this guide.
Attention and Warning Symbols
You must be aware of safety when you install and use this system. This Installation Guide provides various procedures. If you do some of these procedures carelessly, you could injure or kill yourself or damage equipment or property. Some other procedures require special attention.

Marks a procedure where the following may happen:
• Personal injury or death may occur.
• Equipment or property may be damaged.

Marks the following issues:
• Important operation or maintenance instructions follow.
• Special attention is required.

Important Safety Instructions
Keep safety in mind when you install and use the DISH Pro Plus 44 Switch. Refer to the safety instructions in the installation instructions that came with your antenna system. Refer to the safety instructions below when installing this equipment:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings.
8. Install in accordance with the manufacturer’s instructions.
9. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

10. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

11. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

12. The power plug must be readily accessible so that equipment can be easily disconnected from the AC power.

13. Use only attachments/accessories specified by the manufacturer.

14. Unplug this apparatus during lightning storms or when unused for long periods of time.

15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

16. The power inserter assembly shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

**WARNING:** To reduce the risk of fire or electric shock, do not expose the power inserter assembly to rain or moisture.
Keep the following in mind when you install the DPP44:

- Before you drill any holes in your building, make sure there are no wires or pipes near the holes.
- Install the equipment in accordance with the local building and electrical codes. If you aren’t sure, call a licensed building inspector or electrician for help.
- Never install near power lines (separation should be in accordance to company safety guidelines).
- Don’t install on composite materials such as strand, chip, fiber, or particle board unless the fastener attaches securely to a wall stud, rafter, or other foundation material beneath the surface.
- Bolting torque of the screws for proper ground fixation is 50 inch-pounds.
Table of Contents

Introduction...........................................................2
Installation Instructions .......................................3
  Mounting and Connecting the Switch .............3
  Setting Up the Receivers ...............................9
  Wiring Diagrams ..............................................13
Limited Warranty ................................................17
DISH’s Exchange Programs .................................19
  Advance Exchange Program .........................19
  Post Receipt Exchange Program ................20
Accessory Warranty ...........................................21
If You Need Help .................................................21
FCC Compliance..................................................23
Introduction

The DISH Pro Plus 44 Switch (DPP44) features DISH Pro Plus technology, LNBF inputs for four orbital locations, four receiver output ports (including up to four DISH Pro Plus dual-tuner receivers when used with DISH Pro Plus Triplexers/Separators), trunk ports to add additional DISH Pro or DISH Pro Plus switches, and is UL listed as an approved grounding block.

Only connect DISH Pro, DISH Pro Plus, and DISH Bandstacked FSS and DBS LNBFs to the DPP44 Switch. You can also use the DPP44 switch with a Node in DPX installations.

Compatible satellite receivers include the following:

- DISH Pro satellite receivers have a single SATELLITE IN port that can be directly connected to a DPP44 receiver port. These receivers and other DISH Pro products are identified by the DISH Pro logo shown.

- DISH Pro Plus satellite receivers have two SATELLITE IN ports that can be connected to one DPP44 receiver port if used with a DISH Pro Plus Triplexer/Separator. If a DISH Pro Plus Triplexer/Separator is not used, the two SATELLITE IN ports can be directly connected to two DPP44 receiver ports. These receivers and other DISH Pro Plus products are identified by the DISH Pro Plus logo shown.
• DPX satellite receivers must be connected to a Node before connecting to a DPP44 receiver port. These receivers and other DISH Pro X products are identified by the DPX logo.

• For other DISH receivers without DISH Pro or DISH Plus logos (Legacy receivers), you can directly connect the SATELLITE IN port to a DPP44 receiver port. However, a DISH Pro or DISH Pro Plus receiver must be installed first and remain connected to power (not through a switched outlet) to power the switch.

Installation Instructions

This guide explains how to install the DPP44 Switch. The following instructions assume you have already pointed your dish(es) for the strongest possible signal. If not, you must install the dish using the instructions that came with it before installing the switch.

Note: Your receiver may need to download current software prior to connecting to the DPP44 switch.

Mounting and Connecting the Switch

1. Mount the DPP44 switch onto a sturdy structure, such as the side of a building. Make sure the mounting location is stable, and that you fasten the switch tightly to the surface. The DPP44 should be attached by suitable hardware for the
mounting surface. See Figures 1 and 2 for possible mounting examples.

⚠️ Do not plug in the power inserter until you have made all LNBF and receiver connections to the switch.

⚠️ The DPP44 Switch can be installed outside your home or building because this device is designed for outside use.

⚠️ You can have up to 200 feet of cable between a DISH Pro LNBF and a DPX, DISH Pro or DISH Pro Plus satellite receiver. The DPP44 Switch can be connected at any point along the 200 feet of cable. Legacy receivers should have no more than 100 feet of cable to the LNBF. RG-6 cable rated for 950 to 3000 MHz must be used.
Note: The DPP44 Switch can be mounted to a vertical or horizontal surface, as long as the To Dish, To Additional Switch, and To Receiver ports do not point up. Use drip/
service loops on all coaxial cables to help prevent leakage of moisture into the switch.

2. **Ground the system in accordance with the National Electrical Code® (NEC) and all state and local electrical codes.**

   **Note:** The DPP44 is UL-listed as an approved grounding block. If using the switch as a grounding block, observe the following:

   • Use 14 or 10 AWG copper wire, 8 AWG Aluminum, or 17 AWG copper-coated steel wire.
   • Ground the earth-ground lug located at the bottom left edge of the switch to the main structure ground according to code. The length of this main ground wire is not to exceed 20 feet.
   • Ground each antenna used to one of the ground lugs located along the top of the switch.

   **Note:** The bolting torque of the ground lug screws is 50 inch-pounds for proper ground fixation.

3. **Connect the RG-6 coaxial cables from the LNBFs in your system to the ports on the DPP44 labeled To Dish.** Use the desired orbital locations (based on programming) for the least compatible receiver in the installation to determine connection order from the LNBFs to the DPP44 Switch. Refer to the Wiring Diagrams that begin on “Wiring Diagrams” on page 13.

   **Satellite Locations:** For 72.7°W, 77°W, 118.7°W and 121°W orbits, it is recommended that these orbits be connected to the **To Dish Port 4** connection. Orbits 61.5°W, 110°W, 119°W, and 129°W can to connected to any open Dish port.

Page 6
4. Connect a cable from the **To Power Inserter 1** port on the switch to the **To Switch Input 1** port on the power inserter.

Any devices such as diplexers installed between the power inserter and the switch must support at least 50 volts and 2 amps of current. Devices not meeting these requirements may be damaged by power from the inserter.

The power inserter must be installed in the cable connected to the switch’s **To Power Inserter 1** or the switch will not work.

The power inserter must be installed indoors.
5. Connect RG-6 cables from the DPP44 ports or the power inserter port labeled **TO RECEIVER SATELLITE IN** to the **SATELLITE IN** ports on the DISH receiver’s back panel. Each receiver output from the switch supplies signals from up to four satellite locations to the connected receivers. For single-cable, dual-tuner installations using a DISH Pro Plus Triplexer/Separator, connect the DPP Triplexer/Separator’s **INPUT** to one of the switch’s (or power inserter) **TO RECEIVER SATELLITE IN** ports, then connect cables between the DPP Triplexer/Separator’s **SATELLITE IN 1** and **SATELLITE IN 2** ports and the receiver’s **SATELLITE IN 1** and **SATELLITE IN 2** ports. For DPX installations, connect a switch’s **TO RECEIVER SATELLITE IN** port to a Node, then connect cables between the Node and the receiver.

Do not connect receivers to the switch ports labeled **TO ADDITIONAL SWITCH** as this can cause receivers in the system to experience loss of video.

6. Plug the power supply for the power inserter into a power outlet. Be sure the power inserter is not connected to a switched outlet.
Setting Up the Receivers

After you have connected cables and the DPP44 Switch to all receivers in the system, continue with setting up the receivers. Power up the receiver(s) and the TV. Some receivers use a Receiver Setup Wizard, while others need Check Switch run. Instructions for both cases are provided; follow the instructions that apply to the receiver.

Receiver Setup Wizard

Some receivers support a Receiver Setup Wizard, which programs the remote to the receiver, downloads software, and runs Check Switch. If the receiver has a Receiver Setup Wizard, complete the steps in the Wizard, following the on-screen prompts. Figure 3 provides an example of the first prompt in the Wizard.

Note: The Download Software step of the Receiver Setup Wizard fails to proceed if the antenna is not pointed correctly. If you see a pop-up instructing you to make sure that all cables leading to the receiver are connected securely and correctly, verify your antenna is pointed correctly before selecting Continue on this screen.
Run Check Switch

If the Receiver Setup Wizard does not appear when the receiver is powered and after you have connected cables and the DPP44 switch to all receivers in the system, run Check Switch on a DISH Pro, DISH Pro Plus, or DISH Pro X receiver first, then run Check Switch on the other receivers in the installation.

1. Press MENU on the remote control, then select **System Setup**, **Installation**, and then **Point Dish**.
2. A Point Dish screen similar to Figure 4 opens.

3. Select **Check Switch** or **Check**. The Installation Summary screen opens. If your Installation Summary screen has a **4-Sat** option, be sure it is checked. Select **Check** or **Test**. **Note**: Do not pair a remote to all receivers to run **Check Switch** simultaneously. Start **Check Switch** on each receiver individually.

4. The **Check Switch** test runs. When it finishes, you return to the Installation Summary screen. While your screen may not look exactly like the one shown in Figure 5, you see the following:
   - **Switch** identified as DPP44. Legacy receiver models 2800, 3900, 4900, and 6000 identify the DPP44 as SW21 4-Sat. Legacy receiver models 1000, 3000, 4000, 5000,
JVC-DVHS (IRR), and DishPlayer 7100/7200 identify the DPP44 as SW64.

- **Satellite** correctly identifying the connected orbital locations.
- **Device** (LNBFs) correctly identified.
- **Status** of satellite reception verified

![Installation Summary Example](image)

**Figure 5. Installation Summary Example**

If any of the information is missing, check all connections, verify the power inserter is plugged in to a working outlet, ensure the receiver has current software, then run **Check Switch** again.
Wiring Diagrams

These wiring diagrams omit cable drip/service loops and grounding for clarity. Use drip/service loops and ground the system in accordance with NEC, state, and local electrical codes.

The following diagrams represent possible wiring configurations using the DPP44 switch. Diagrams 1 and 2 show LNBF and DPP44 switch possibilities while Diagram 3 shows a trunking possibility. While connecting this equipment, please keep in mind the following considerations:

- Make sure there is no more than 200 feet of RG-6 cable between the LNBF and DP, DPP, or DPX receiver(s).
- Legacy receivers can have no more than 100 feet of RG-6 cable to the LNBF.
- Only DISH Pro, DISH Pro Plus, or DISH Bandstacked FSS and DBS LNBFs can be connected to the DPP44. You can also use the DPP44 switch with a Node in DPX installations.
Diagram 1. DISH 500 with Optional Additional Dishes (or DISH 1000.2 using Three-LNBF Bracket with Optional Second Dish)
Diagram 2. Possible Configurations of a DPP44 Switch
Diagram 3. Three DPP44s for up to Twelve Receivers

Connect the To DISH ports of the DPP44 Switch(es) to the To ADDITIONAL SWITCH ports on the other switch. Connect a power inserter to the To POWER INSERTER port on each switch.

You must have a power inserter connected to the To POWER INSERTER port and plugged in on each DPP44 Switch.

Note: Other switches, such as the DP34 and DPP33, can be connected to the DPP44’s To ADDITIONAL SWITCH ports. However, the receivers connected to these other switches will only receive the number of satellite locations supported by that switch. DISH Pro Plus capability is provided by the switch to which the receivers are connected, so any receivers connected to a non-DPP switch will not be able to use the single-cable, dual-tuner install advantage.
Limited Warranty

This warranty extends only to the original user (“you,” “your”) of the DISH Network™ DPP44 Switch and is limited to the purchase price of the switch. EchoStar Technologies L.L.C. and its affiliated companies (“we,” “our,” “us”) warrant this switch control against defects in materials or workmanship as follows.

For one year from the original date of purchase, if we find that the switch is defective subject to the limits of this warranty, we will replace the switch at no charge for parts or labor. We warrant any such work done against defects in materials or workmanship for the remaining part of the original warranty period.

This warranty does not cover installation of the DISH Network™ system; consumer instruction; physical set up or adjustment of any consumer electronic device; signal reception problems; loss of use of the equipment; unused programming charges due to equipment malfunction; cosmetic damage; damage due to lightning, electrical or telephone line surges, fire, flood, or other acts of Nature; accident; misuse; abuse; repair or alteration by other than our factory service; negligence; commercial or institutional use; improper or neglected maintenance; equipment sold AS IS or WITH ALL FAULTS; equipment removal or reinstallation; shipping damage if the equipment was not packed and shipped in the manner we prescribe; nor equipment purchased, serviced, or operated outside the contiguous United States of America.
REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. WE SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS DEVICE, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS DEVICE. UNDER NO CIRCUMSTANCES SHALL OUR LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS DEVICE. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS DEVICE IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. WE RESERVE THE RIGHT TO REFUSE TO HONOR THIS WARRANTY IF WE DETERMINE ANY OF THE ABOVE EXCEPTIONS TO HAVE CAUSED THIS DEVICE NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK, INCLUDING BUT NOT LIMITED TO SERIAL OR CONDITIONAL ACCESS NUMBERS, HAS BEEN ALTERED OR REMOVED. THIS WARRANTY SHALL ALSO BE VOID IF THE DEVICE HAS BEEN OPENED BY AN UNAUTHORIZED PERSON.

This warranty gives you specific legal rights which may vary from state to state. Some states do not allow the exclusion or limitations of incidental or consequential damages, or allow limitations on the duration of an implied warranty, so those limitations may not apply to you.
DISH’s Exchange Programs

DISH offers two options if you need to replace your equipment or its accessories.

Advance Exchange Program

The Advance Exchange Program allows you to have replacement equipment shipped immediately to you (depending upon where you live, it could take three to five business days). Along with replacement equipment, you will receive a prepaid shipping label and instructions on how to return the defective equipment.

The shipping charge, for receiving replacement equipment and returning the defective equipment, is a one time fee based on DISH's competitive bulk shipping rates (additional charges may apply outside of the continental US). This fee will be charged to your billing account or your valid credit card.

If you do not ship the defective equipment to DISH within ten days after receiving the replacement, your billing account or credit card will be charged the market price of the replacement. If you return the defective equipment after ten days, you will receive a full refund less an administrative fee.
If your equipment is out of warranty and can be repaired your billing account or credit card will be charged the standard repair fee for the replacement. If damage to the defective equipment is found, which DISH in its sole discretion determines has voided the warranty, or makes the equipment unrepairable, your billing account or credit card will be charged the market price of the replacement.

**Post Receipt Exchange Program**

You may choose to ship the equipment to us at your cost. To provide faster service, upon receipt of your equipment you will be shipped a replacement. Your original equipment will not be available for return. The equipment you return will be checked to verify whether it is covered under this warranty.

If the defective equipment is covered under this warranty, a replacement will be shipped to you (additional charges may apply outside of the continental US).

If your equipment is not covered under warranty and can be repaired your billing account or credit card will be charged the standard repair fee for the replacement. If damage to the defective equipment is found, which DISH in its sole discretion determines has voided the warranty, or makes the equipment unrepairable, your billing account or credit card will be charged the market price of the replacement.
Accessory Warranty

An accessory is any DISH-branded equipment, displaying the DISH logo, excluding the receiver, smart card, cables and hookups, and non-mechanical components. A one-year warranty becomes effective upon the activation of the DISH system or date of purchase, if bought separately. A proof of purchase is required to verify the purchase date. If an accessory has an expired warranty, no exchange will be issued. You may purchase replacement accessories from DISH or your local retailer.

If You Need Help

Review these Installation Instructions.

Go to www.mydish.com/chat to contact a Customer Service Representative via chat. Have the date of purchase and your customer account number ready.

Alternatively, you can call the DISH Customer Service Center directly at 1-800-333-3474 (DISH). Remember to have the date of purchase and your customer account number.

A Representative will assist you. The Representative will try to troubleshoot any problem you may be having. He or she also will check whether the switch is covered under this warranty.
If the Representative finds that you should return the switch, you will get a telephone number to call for a Return Authorization (RA) number. Before shipping any equipment to us, you must get a Return Authorization number from the Customer Service Center.

You must package returned equipment properly. Follow the instructions that the Representative gives you. Write the RA number in large, clearly visible characters on the outside of the shipping box used to return the equipment. To avoid confusion and misunderstandings, we will return shipments without an RA number clearly visible on the outside of the box to you at your expense.

We will:

• Check the switch, including whether it is covered under the warranty.
• Replace any switch that we find is defective with a new or refurbished switch.
• If the defective switch is covered under warranty, we will ship a replacement to you at our expense. If a defective switch is not covered under the warranty, we will tell you. We may assess you a flat rate charge for a replacement switch, including shipping and insurance.
FCC Compliance

This device complies with Part 15 of the FCC rules. Operation is subject to the following two 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Do not make changes or modifications to this equipment. This could void the user’s authority to operate the equipment.

If none of the remedies stops the radio interference, you should contact a licensed radio/television technician, your satellite dealer, or call the Customer Service Center at 1-800-333-DISH (3474) for assistance.