



**DISH Pro 34
Multi-Dish Switch**

***Installation
Guide***

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Important Safety Instructions

You *must* keep safety in mind when you install and use the DP34 switch. Refer to the safety instructions in the installation instructions that came with your system. In this *Guide*, the following notes tell you when you need to pay special attention:

	<p>Marks a procedure where the following may happen:</p> <ul style="list-style-type: none">• Personal injury or death may occur.• Equipment or property may be damaged.
	<p>Marks the following issues:</p> <ul style="list-style-type: none">• Important operation or maintenance instructions follow.• Special attention is required.

Why install a DP34 Switch

A DP34 switch allows you to receive signals from two or three DISH Network satellites, and route these signals to as many as four DishPro satellite receivers per switch.

DP34 switches allow you to add as many as four DishPro receivers to your system by adding just one DP34 switch. What's more, up to three DP34 switches can be connected to each other, so that you can route the satellite signal from two or three satellites to as many as twelve DishPro receivers.

Note: Some DishPro receivers have more than one tuner — for example, the DishPVR 721 receiver has two. In this case, one DP34 switch can be used to deliver the satellite signal to two of these receivers, or to one of these receivers and two DishPro one-tuner receivers.

Introduction

This *Guide* explains how to install one or more DP34 Multi-Dish Switch(es). You should use this *Guide* along with the *DishPro Installation Instructions* that are in the user guide that came with your receiver.



Warning: The DP34 switch can be used *only* with DishPro LNBFs and DishPro receivers. DishPro products can be identified by the DishPro logo shown below.



If your system has LNBFs that do not have the DishPro logo, you *cannot* use the DP34 Switch in your system. However, you *can* use the DP34 Switch if there are receivers in your system that do not have the DishPro logo if you buy a DishPro Adapter for each of these receivers. DishPro Adapters can be purchased from your DISH retailer, or by calling our Customer Service Center at 1-800-333-DISH (3474)

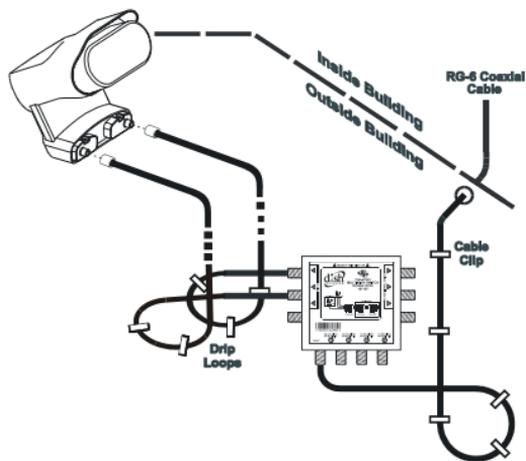
Note: The following instructions assume you have already pointed your dish for the strongest possible signal, and have run **Check Switch** with the DishPro LNBF connected directly to the receiver's **Satellite In** port. If not, you must install the Dish, following the instructions that came with it, before doing the following.

How to Install a DP34 Switch

1. Mount the DP34 switch onto the side of a building, or on some other sturdy structure. Make sure that the mounting location is stable, and that you fasten the switch tightly to the surface. The DP34 should be fixed by suitable hardware for the wall or ceiling.

	The DP34 switch can be installed <i>outside</i> your home or building, because this device <i>is</i> designed for outside use.
	You can have up to 200 feet of cable between a DishPro LNBF and a DishPro satellite receiver with the DP34 Switch connected at any point along the 200 feet of cable. The cable must be rated for 950 to 2150 MHz. Some cable is labeled “Swept tested to 2150 MHz.” If you are unsure whether your cable is rated to 2150 MHz, check the container it came in or talk to your retailer.

Note: Mount the switch so that the connections are horizontal (as shown in Figure 1), and put drip loops in all coaxial cables. This helps prevent leakage of moisture into the switch.



FOR EXAMPLE ONLY

Figure 1

2. Connect the coaxial cables from a DISH 500 or a DISH 300 to the ports on the DP34 switch labeled “to Dish” (see also the wiring diagrams that begin on page 11).
3. Connect the cables from the Dish receiver’s back panel Satellite In port(s) to the DP34 ports labeled “to Receiver Satellite In.” The switch’s four outputs each provide signals from two or three satellites, so you can route the signals from two or three satellites to as many as four DishPro receivers or tuner inputs.



- Do not connect the receiver to the ports labeled “To additional switch” as this can cause other receivers in the system to experience loss of video.

4. The switch takes the place of a ground block. Article 820-40 of the *National Electrical Code* (NEC) states that you should locate a ground block as close as possible to where you have the system connected to the ground (for example, to a water pipe or rod driven in the ground). So, do the same for the switch.

After you have connected cables and DP34 Switches to all receivers in the system, you will need to run

Check Switch *on each receiver in your system*, one at a time. To do this, follow these instructions for each receiver:

1. Select the **Main Menu**, then **System Setup**, **Installation**, and **Point Dish/Signal**, or push 6-1-1 on the remote.
2. A **Point Dish/Signal** menu similar to the one shown as Figure 2 will open.

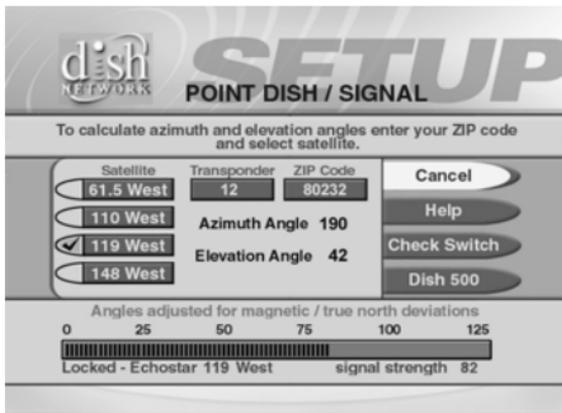


Figure 2

3. Select **Check Switch**. The **Check Switch** screen will open. Select **Check**.
4. The **Check Switch** procedure will run. When it finishes, you will see an **Installation Summary** screen. This screen should identify the installed switch as a DP34. You should see “110” and “119” on the “Satellite,” line, and the word “All” under both **1** and **2**. You should also see the message “Satellite reception verified,” and your LNBFs (“Devices”) correctly identified. If your system includes three satellites, you should see Dish Input for three satellites, and all three satellites correctly identified, as illustrated in Figure 3.



Figure 3

5. While your screen may not look exactly like the one shown here, you *must* see Dish input from both satellites (or all three satellites, if applicable), the “Satellite reception verified” message, and your LNBFs (Devices) correctly identified. If you do not, you will need to check all cables and switches, and then run **Check Switch** again.



The wiring diagrams in this *Guide* that begin on page 11 omit cable drip loops and grounding for clarity. Make sure to use drip loops, and to ground the system per the *National Electrical Code* (NEC) and all local electrical codes.

If you still do not see the “Satellite reception verified” message, select **Details**. This screen provides information that may be helpful in trouble-shooting the problem or in reporting it to the DISH Network Customer Service Center.

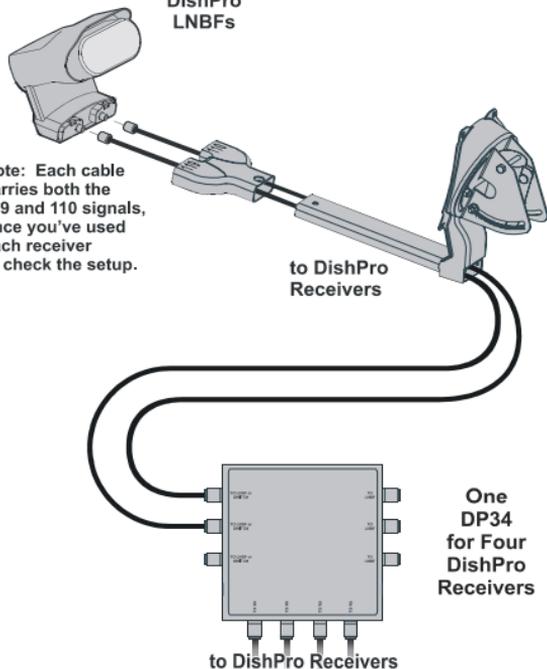
Wiring Diagrams

DISH 500 with DishPro Twin LNBF and a DP34 Switch

DISH 500
110 West and 119 West

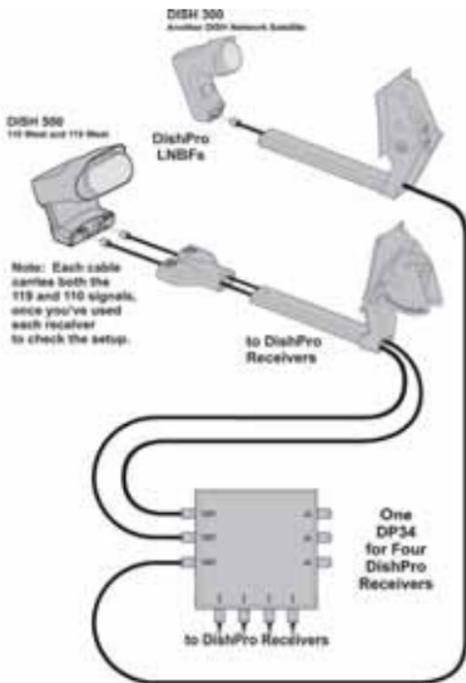
DishPro
LNBFs

Note: Each cable carries both the 119 and 110 signals, once you've used each receiver to check the setup.



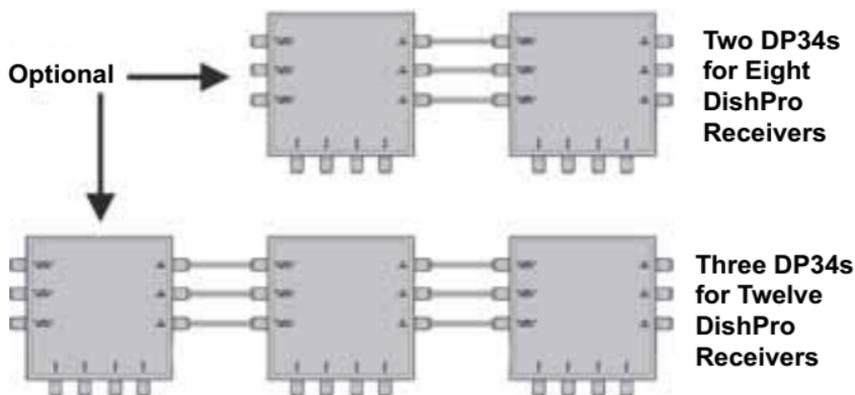
Connect both ports (connections) on the DishPro Twin LNBF to any two ports on the DP34 Switch that are marked “to Dish.” Make sure there is no more than 200 feet of cable between the LNBFs and the receiver(s).

DISH 500 with DishPro Twin LNBF and Dish 300 with Single DishPro LNBF and a DP34 Switch



Connect both ports (connections) of the DishPro Twin LNB to any two ports on the DP34 Switch that are marked “to Dish.” Connect the DishPro Single LNB to any port of the DP34 marked “to Dish.” Make sure there is no more than 200 feet of cable between the receiver and the LNB.

Connecting Several DP34 Switches



Connect DishPro LNBFs to ports marked “to Dish.”

Connect DP34 Switches together between ports marked “to Additional Switch” or “to Dish.”



You must have at least one satellite receiver connected to each DP34 switch in order to provide power to that switch.

Limited Warranty

This warranty extends only to the original user of the DISH Network™ DP34 Switch (“you,” “your”) and is limited to the purchase price of the switch. EchoStar Communications Corporation 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; switch batteries; 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 (with the exception of opening the battery cover).

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.

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 EchoStar'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 EchoStar 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 EchoStar 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, it will be replaced and shipped back to you at no additional cost (additional charges may apply outside of the continental US).

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 EchoStar 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 Network branded equipment, displaying the DISH Network 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 Network or your local retailer.

If You Need Help

Review this Guide.

Call the DISH NetworkSM Service Center at 1-800-333-DISH (3474). Have the date of purchase and your customer account number ready.

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 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 the warranty. We will ship the replacement switch 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 Rules

Note: 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.

UL Information

Bolting torque of the screw for ground fixation: 50 pound inches.

Grounding wire size: 8-17AWG.

Notes

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The information in this *Guide* may change without notice. Revisions may be issued to tell you about such changes.

You should address comments or questions about this *Guide* to *Technical Publications, EchoStar Technologies Corporation, 94 Inverness Terrace East, Englewood, Colorado 80112.*

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