SIRIUS/SATELLITE RADIO

SIRIUS/DBS SIGNAL COMBINER/SPLITTER

Installation Guide
Congratulations on the purchase of the SIRIUS/DBS Signal Combiner/Splitter. The SIRIUS/DBS Signal Combiner/Splitter allows you to combine your Dish Network® or DIRECTV® signal with the SIRIUS® signal into one RG-6 cable, avoiding the necessity of installing a separate cable from the SIRIUS antenna to the SIRIUS receiver. Instead, both the satellite TV signal and SIRIUS signal are combined together outdoors near the satellite TV dish and, later, inside the home at a convenient location, the combined signal is split back into two separate signals. Use this manual to familiarize yourself with all of the SIRIUS/DBS Signal Combiner/Splitter’s capabilities and installation instructions.

For the latest information about this and other SIRIUS products, please visit http://www.sirius.com
Box Contents

Unpack your SIRIUS/DBS Signal Combiner/Splitter and be sure that everything shown below is present. If anything is missing or damaged, or if your SIRIUS/DBS Signal Combiner/Splitter fails to operate properly, notify the dealer or retailer where you purchased the product immediately. It is recommended that you retain the original receipt, carton, and packing materials in case you need to return or ship your SIRIUS/DBS Signal Combiner/Splitter in the future.

A  Signal Combiner (SR-2260)
B  Signal Splitter (SR-2250)
C  Power Supply
D  Mounting Screws (4)
E  30 ft. RG-58, SMA to SMA Connector, SIRIUS Outdoor Antenna to Signal Combiner Cable
F  3 ft. RG-6, F to F Connector, LNBF to Signal Combiner Cable
G  10 ft. RG-58, SMA to SMB Connector, Signal Splitter to SIRIUS Receiver Cable
H  10 ft. RG-6, F to F Connector, Signal Splitter to DBS Receiver/Tuner Cable
I  This Installation Manual (Not Shown)
Important Pre-Installation Notes

The notes in this section are important and vital to the successful installation of the SIRIUS/DBS Signal Combiner/Splitter. Read this entire section carefully before proceeding with the installation of the SIRIUS/DBS Signal Combiner/Splitter.

Compatibility

While the SIRIUS/DBS Signal Combiner/Splitter is compatible with most DISH Network and DIRECTV systems, there are several instances in which a particular configuration may not be compatible with the SIRIUS/DBS Signal Combiner/Splitter. The following two sections discuss certain incompatibilities with Dish Network configurations and DIRECTV configurations. Read the section for your particular system.

DISH Network Systems

The incompatibilities for DISH Network systems fall into several categories, namely, configurations using a Legacy model LNBF, configurations using Legacy model receivers/tuners, and configurations receiving three orbital locations. The following compatibility chart shows compatible configurations, and the sections following discuss in detail certain incompatibilities.

<table>
<thead>
<tr>
<th>DISH Network Systems Compatibility Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of LNBF</strong></td>
</tr>
<tr>
<td>Legacy</td>
</tr>
<tr>
<td>Dish Pro</td>
</tr>
<tr>
<td>Dish Pro</td>
</tr>
<tr>
<td>Dish Pro Plus</td>
</tr>
<tr>
<td>Two Dish Pro's</td>
</tr>
<tr>
<td>Dish Pro &amp; Dish Pro Plus</td>
</tr>
<tr>
<td>Super Dish &amp; Dish Pro</td>
</tr>
</tbody>
</table>
DISH Network Legacy Model LNBF

There are three models of LNBFs which are found in DISH Network systems:

- Dish Pro LNBF
- Dish Pro Plus LNBF
- Legacy LNBF

Of these three models, the Legacy LNBF is not compatible with the SIRIUS/DBS Signal Combiner/Splitter. To determine which model of LNBF your DISH Network system is using, examine the satellite dish or the LNBF located on the satellite dish. If the designation “Dish Pro” or “Dish Pro Plus”, or the corresponding logo (shown to the right), are not found on the satellite dish or on the LNBF, then your DISH Network system is using a Legacy LNBF which will not work with the SIRIUS/DBS Signal Combiner/Splitter.

DISH Network Legacy Model Receivers/Tuners

The SIRIUS/DBS Signal Combiner/Splitter is compatible with the following DISH Network receivers/tuners:

- Dish Pro Single Receiver/Tuner
- Dish Pro Plus Dual Receiver/Tuner
- Legacy Receiver/Tuner with a DishPro Adapter

If your configuration is using a Legacy receiver/tuner, check to be sure it has a DishPro adapter connected to it. If it does, then the SIRIUS/DBS Signal Combiner/Splitter will work with the Legacy receiver/tuner, provided that the SIRIUS/DBS Signal Combiner and/or Splitter is not installed between the Legacy receiver/tuner and the DishPro adapter.

A Legacy receiver/tuner which does not have a DishPro adapter connected is not compatible with the SIRIUS/DBS Signal Combiner/Splitter. However, if you have a configuration which uses multiple receivers/tuners, remember that the ‘Dish Pro Single’ and ‘Dish Pro Plus Dual’ receivers/tuners are compatible. Install the SIRIUS/DBS Signal Combiner/Splitter in the leg of your configuration with a compatible receiver/tuner, and not in the leg with the incompatible Legacy receiver/tuner.

DISH Network Systems Receiving Three Orbital Locations

DISH Network systems which receive three orbital locations are not compatible with the SIRIUS/DBS Signal Combiner/Splitter. Systems which receive one or two orbital locations are compatible, as well as systems receiving four orbital locations which use a “DP Plus 44” multiswitch.
**DIRECTV Systems**

The incompatibilities for DIRECTV systems are limited to two categories, namely, configurations using three LNBFs with a multiswitch which is not powered externally, and configurations using three LNBFs with a multiswitch co-located with the LNBFs at the satellite dish. The following compatibility chart shows compatible configurations, and the sections following discuss in detail certain incompatibilities.

<table>
<thead>
<tr>
<th>Number of LNBFs</th>
<th>Multiswitch Present?</th>
<th>Compatible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Yes, without external Power Supply or co-located with LNBFs at satellite dish</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Yes, with external Power Supply</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**DIRECTV with Three LNBFs with External Multiswitch**
If your configuration uses three LNBFs, and has a multiswitch, the multiswitch must be externally powered to be compatible with the SIRIUS/DBS Signal Combiner/Splitter. Externally powered means that the multiswitch is connected to an AC outlet. Examine your multiswitch to determine if it is connected to an AC outlet. There should also be a label on the multiswitch which specifies the external power requirements, if it is externally powered. If the multiswitch is not externally powered, your configuration will not work with the SIRIUS/DBS Signal Combiner/Splitter.

**DIRECTV with Three LNBFs with Co-Located Multiswitch**
If your configuration uses three LNBFs which have a multiswitch co-located with the LNBFs at the satellite dish, it is not compatible with the SIRIUS/DBS Signal Combiner/Splitter.

**Cable Length**
When the SIRIUS and DBS signals are combined together in one RG-6 cable, the maximum length of the cable should not exceed 200 feet.

**Multiswitches, Signal Splitters, DishPro Adapters**
If your satellite TV configuration is using multiswitches, signal splitters, DishPro adapters (DISH Network), or other device, all these devices will prevent the SIRIUS signal from passing through them, therefore the SIRIUS signal cannot be combined with the satellite TV signal when passing through these devices. Instead, the SIRIUS signal and satellite TV signal have to be both combined and split either before or after these devices.

Stated in the simplest terms, between the SIRIUS/DBS Combiner and the SIRIUS/DBS Splitter, there can only be an uninterrupted length of RG-6 cable.
Configuration Considerations

There are differing configurations which may be found in satellite TV systems. You should determine your overall configuration, and where you will be installing the SIRIUS/DBS Signal Combiner/Splitter in your configuration before proceeding with the installation. Generally, you’ll want to install it nearest to the receiver/tuner where you will be using your SIRIUS receiver.

A simple configuration using the SIRIUS/DBS Signal Splitter/Combiner might look like the illustration shown to the right.

Other installations (shown below and on the next page) all follow the same guideline, that there cannot be any device between the SIRIUS/DBS Combiner and the Splitter. Refer to these illustrations to determine where you will install the SIRIUS/DBS Signal Splitter/Combiner in your system.
Installation Procedure

Once you have determined where in your system you will be mounting the SIRIUS/DBS Signal Combiner/Splitter, you can proceed with the installation. If you have not yet mounted your SIRIUS outdoor antenna, do that first, carefully following the installation instructions included with the outdoor antenna. For ease of installation, mount the outdoor antenna on the support bracket for the satellite TV dish as shown in the antenna installation instructions, however, the SIRIUS antenna may be mounted anywhere within 30 feet of the satellite TV dish.

Once the SIRIUS outdoor antenna has been mounted, follow these steps to install the SIRIUS/DBS Signal Combiner/Splitter.

Outdoors:

1. Install the Signal Combiner (shown as A on page 3) in a convenient location within 3 feet of the satellite TV dish using the provided screws.

2. Disconnect the cable which brings the signal from the satellite TV dish and connect that cable to the Signal Combiner connector labeled COMBINED OUT.

Depending upon where you are installing the SIRIUS/DBS Signal Combiner/Splitter in your system, this cable may be connected to the LNBF at the satellite dish, or connected to a multiswitch, or connected to a signal splitter, etc. When disconnecting this cable, make a note of where it was connected for the next installation step.
3. Connect one end of the 3 ft. RG-6 cable (shown as F on page 3) to the device from which the cable in Step 2 was disconnected (i.e., the satellite dish LNBF, or the multiswitch, or the signal splitter, etc.).

4. Connect the other end of cable F to the Signal Combiner connector labeled DBS IN. When connected, be sure to slide the rubber boots on each end of the cable over the connections to protect the connections from the weather elements.

5. Connect one end of the 30 ft. RG-58 cable (shown as E on page 3) to the SIRIUS outdoor antenna.

6. Connect the other end of cable E to the Signal Combiner connector labeled SIRIUS IN. When connected, be sure to slide the rubber boots on each end of the cable over the connections to protect the connections from the weather elements.

Indoors:
1. Install the Signal Splitter (shown as B on page 3) near to where the cable which brings the signal from the satellite TV dish terminates. Use the provided screws for mounting.

2. Disconnect the cable which brings the signal from the satellite TV dish from the device that it is connected to (i.e., a Receiver/Tuner, or a Multiswitch, or a DishPro Adapter, etc.), and connect this cable to the Signal Splitter connector labeled COMBINED IN. When disconnecting this cable, make a note of where it was connected for the next installation step.

3. Connect one end of the 10 ft. RG-6 cable (shown as H on page 3) to the device from which the cable in Step 2 was disconnected (i.e., the Receiver/Tuner, or the Multiswitch, or the DishPro Adapter, etc.).

4. Connect the other end of cable H to the Signal Splitter connector labeled DBS OUT.

5. Connect one end of the 10 ft. RG-58 cable (shown as G on page 3) to the Signal Splitter connector labeled SIRIUS OUT.

6. Connect the other end of cable G to your SIRIUS receiver.
7. Connect the Power Supply (shown as C on page 3) to the Signal Splitter, and plug the Power Supply in a working AC outlet.

This completes the installation of the SIRIUS/DBS Signal Combiner/Splitter. Power on your SIRIUS receiver and satellite TV system to verify that they are working correctly and that the installation was successful.

**Troubleshooting**

If the SIRIUS receiver displays the message “ANTENNA NOT DETECTED”, the first thing to do is to verify that you have installed the SIRIUS/DBS Signal Combiner and Splitter correctly.

1. Follow the step-by-step installation instructions again, verifying each connection and cable type, and checking that the cable connectors are screwed on tight.

2. Is there any device such as a Multiswitch, Splitter, DishPro Adapter, etc., between the SIRIUS/DBS Signal Combiner and Splitter? If so, you have installed the SIRIUS/DBS Signal Combiner and Splitter incorrectly. These devices prevent the SIRIUS signal from passing through. Consult the illustrations on pages 7, 8, and 9 for proper installation, and reinstall the SIRIUS/DBS Signal Combiner/Splitter.

3. Verify that the Power Supply for the SIRIUS Splitter connected to the SIRIUS Splitter, and is plugged into a working AC outlet.

If the SIRIUS receiver displays the message “ACQUIRING SIGNAL”, then the SIRIUS signal is weak.

1. Review the installation instructions included with the SIRIUS outdoor antenna and be sure that the outdoor antenna is installed properly, and aimed in the correct direction, as explained in the installation instructions for the outdoor antenna.

2. It may be necessary to temporarily connect the SIRIUS receiver directly to the outdoor antenna to verify that the outdoor antenna is receiving a good SIRIUS signal. Use the “Antenna Aiming” or “Signal Indicator” feature in your SIRIUS receiver to aim the antenna properly. Consult the user guide which came with your SIRIUS receiver for further information on using this feature.

If you are still unable to resolve the problem, contact your dealer or retailer where you purchased the product, or SIRIUS product support for more help.

**SIRIUS Product Support:** 1-800-869-5590
customercare@sirius-radio.com
Specifications

Combiner & Splitter Dimensions (LxWxH) .......................... 120mm x 59mm x 23mm
4.72” x 2.32” x 0.91”

Combiner Weight ................................................................................. 0.144 kg, 5.08 oz
Splitter Weight .................................................................................. 0.146 kg, 5.15 oz
Frequency Range (SIRIUS) ............................................................... 2320.0 to 2332.5 MHz
Frequency Range (DBS) ................................................................. 950 to 2150 MHz
Power Input .......................................................................................... 20 VDC, 800 mA
Maximum Cable Run (Between Combiner and Splitter) ................. 200 ft. RG-6
Operating Temperature ................................................................. -40C to +85C, -40F to 185F
Operating Humidity ............................................................................ 5% to 95% RH (Rain Resistant)

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