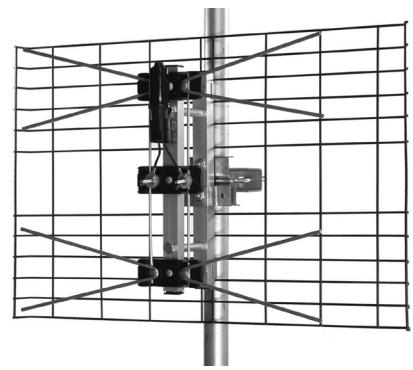




OUTDOOR ANTENNA INSTALLATIONS



Congratulations! Your new Terrestrial Digital antenna will give you the best possible digital and HD picture quality (yes, even better than cable or satellite). Today, local digital TV (DTV)—including HDTV—is available over the air using this antenna. Over-the-air signals are not compressed like cable or satellite transmissions and THEY'RE FREE! Here are a few simple tips to make the installation as easy as possible and optimize the performance of your new antenna.

While your new antenna will allow you to receive local over-the-air (OTA) digital TV stations, it will not provide cable or satellite channels. After local OTA signals are received by your antenna, the digital signals must be decoded, so your DTV set can display a digital picture. To watch true HDTV, you must have:

- Programming originating (produced) in HDTV
- HDTV transmission broadcast (At this time, not all programming from your local station or cable or satellite channels is broadcasted in HD - consult your local programming guide),
- An HDTV tuner (receiver)
- An HDTV monitor (display).

There are currently 3 ways to decode these local DTV stations utilizing this antenna:

1. An HDTV set with a built in digital tuner. Most TVs sold after 2007 will have these built in. Ask if it has one when you purchase it.
2. An over-the-air digital tuner (Often called a set-top box). If the owner's manual of your set top box does not specifically state a digital tuner is included, you will need to purchase a set top box with an ATSC tuner.
3. An HD satellite tuner. Both Dish Network® and DIRECTV® offer HDTV satellite receivers with the over-the-air digital tuner built-in.

Please note that once the antenna is mounted and plugged into the appropriate source on your DTV or digital tuner, you will need to perform a channel scan. If the antenna is moved, the channel scan must be performed again to assure correct alignment.

Installation Tips

1. Mount the antenna on your rooftop for optimal performance. The antenna may be installed in an attic, but this may cause loss of signal strength. Face the front of the antenna towards the transmitting towers. Don't know where your towers are? Visit www.antennapoint.com.
2. Once the antenna is mounted and the cable is connected you are ready to run the cable to your digital tuner, HD satellite receiver or digital TV (Note: shorter cables runs are better).
3. Perform the channel scan—consult your TV manual for instructions.

Note: With digital television, it's an "all or nothing" proposition. On a digital channel you will never see "snow" or "fuzz" If you see "snow" then you are tuned to an analog broadcast. Once a digital signal is acquired, it will be perfect. If that signal is interrupted, it will be blank.

4. Avoid using an antenna mounted amplifier in urban areas.
5. Seal all outdoor connections, especially at the antenna, with a waterproof sealant. Humidity in the atmosphere, can form water droplets and corrode your connections.

Fact: Most of the DTV/HDTV antennas returned to us are in perfect working order, but are returned because of faulty installation techniques.

Trouble Shooting Tips

Common causes of signal loss: (approximate)

- Long cable runs - 30% loss for every 100 ft of RG6
- Satellite Diplexers -10%-50% loss
- Splitters - 50% loss per port
- Corroded connections - 20% -90% loss



If your signal is weak, check the length of your cable run (the shorter the better) and remove any splitters or diplexers. Check all connectors/junctions for secure fit or corrosion. If your cable run must be longer than 75 feet, or you must use a splitter, consider a pre-amplifier-- http://www.antennasdirect.com/antenna_amplifier.html.

When using separate antennas, mounted on the same mast, try and keep at least 4-6 feet vertical separation between antennas. UHF Yagi-style antennas can usually be mounted with about a 4-foot vertical separation. If you want to combine signals so that you have only one lead going into your house, use a UHF/VHF combiner which includes a channel filter for each antenna, so as not to pick up out-of phase signals through the other antenna.

UHF signals are line-of-sight, so clear any obstacles between you and the transmitting towers. Also, moving the antenna to different locations in your attic/roof is advised. Often, experimentation with antenna location resolves a problem. Keep the antenna away from any metallic objects. Mount your antenna away from all reflective surfaces or other antennas.

There may be issues with your digital tuner. Faulty decoding chips or bad firmware can affect sensitivity making it difficult to tune digital stations.

Reflected signals (Multi-path interference) are often a source of problems. For those living close to transmitting towers, multi-path interference occurs when strong signals bounce off nearby buildings and other surfaces causing signal dropouts. If your transmit towers are close, try aiming your antenna in different directions away from the towers and check for more stations received. Users very close to the transmitters can use an attenuator to lower the signal strength to reduce multi-path interference. If you live less than 5 miles from your local transmitters, you may need a variable attenuator to reduce the signal to a level that will not overload your HDTV set.

In rural areas, 20 – 50 miles distant from the transmitter, an outdoor antenna equipped with an amplifier (http://www.antennasdirec.com/antenna_amplifier.html) can provide good reception especially if the signal is not blocked by terrain (hills, etc.)

Another common cause of poor reception is strong signals from FM Radio and TV stations. Your antenna brings in the whole broadcast spectrum and this can overwhelm a receiver. Too much signal is just as bad as too little. Remember, your antenna delivers ALL TV and FM stations to your DTV tuner at once.

Optional Grounding Information

Grounding the coax cable with a coaxial lightning surge protector will protect your equipment from voltage surges created by nearby strikes but will not protect from a direct strike.

To protect yourself from a direct strike attach a lightening arrester to the antenna mast. Connect #8 gauge wire to a copper clad ground rod driving it at least four feet into the ground. Check your local electrical codes to make sure you are in compliance— We recommend calling a professional electrician to advise and/or install.

WATCH FOR WIRES!

Installation of this product near power lines is dangerous. For your own safety, follow these important safety rules.

1. Perform as many functions as possible on the ground.
2. Watch out for overhead power lines. Check the distance to the power lines before starting installation. We recommend you stay a minimum of 6 meters (20 feet) from all power lines.
3. Do not install antenna or mast assembly on a windy day.
4. If you start to drop antenna or mast assembly, get away from it and let it fall.
5. If any part of the antenna or mast assembly comes in contact with a power line, call your local power company. DO NOT TRY TO REMOVE IT YOURSELF! They will remove it safely.
6. Make sure that the mast assembly is properly grounded.

WARNING

Installing antennas on windy days can be dangerous. Because of the antenna surface, even slight winds create strong forces. Be prepared to safely handle these forces at unexpected moments. Do not attempt to assemble, move or mount antenna on windy days or serious, even fatal accidents may occur. Antennas Direct Inc. is not responsible or liable for damage or injury resulting from antenna installations.

WARNING

Antennas improperly installed or installed to an inadequate structure are very susceptible to wind damage. This damage can be very serious or even life threatening. The owner and installer assumes full responsibility that the installation is structurally sound to support all loads (weight, wind & ice) and properly sealed against leaks. Antennas Direct Inc. will not accept liability for any damage caused by an antenna system due to the many unknown variable applications.

WARNING

Do not attempt to install if drunk, pregnant or both.

Do not eat antenna.

Do not throw antenna at spouse.

