

Solid Signal's

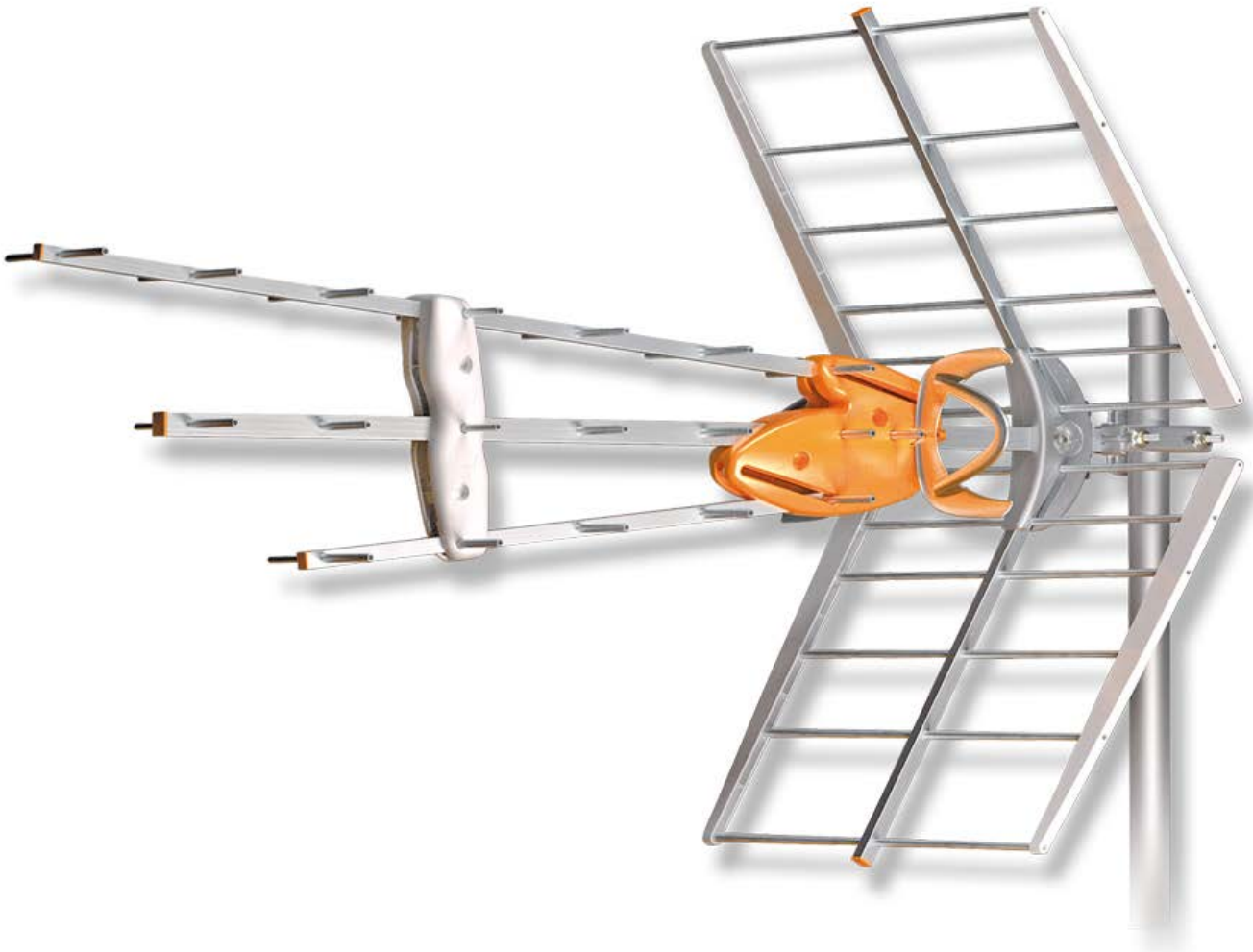
HANDS ON REVIEW



Televes DAT970
UHF-only antenna



Most TV channels have moved to UHF.

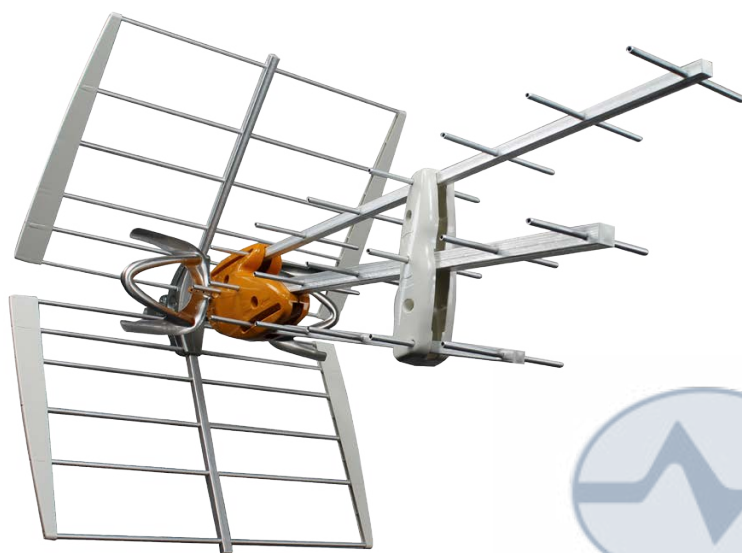


The smart cord-cutter has already researched local channels in the area and knows that the best way to save money is to get the antenna that does exactly what you need. Before choosing an antenna, ask the following questions:

- **How far away can this antenna be from the broadcast towers?**
- **Do I have a roof or attic space where I can mount an antenna?**
- **Can I install this antenna myself?**
- **Do I need an antenna that will stand up to the elements?**
- **How important is price?**

If you're looking for a UHF-only antenna that works very well, holds up to the elements, and comes in at a great price, consider this [Televes DAT790 UHF Antenna](#). It combines durability with advanced technical features that make it an excellent value.

The antenna itself



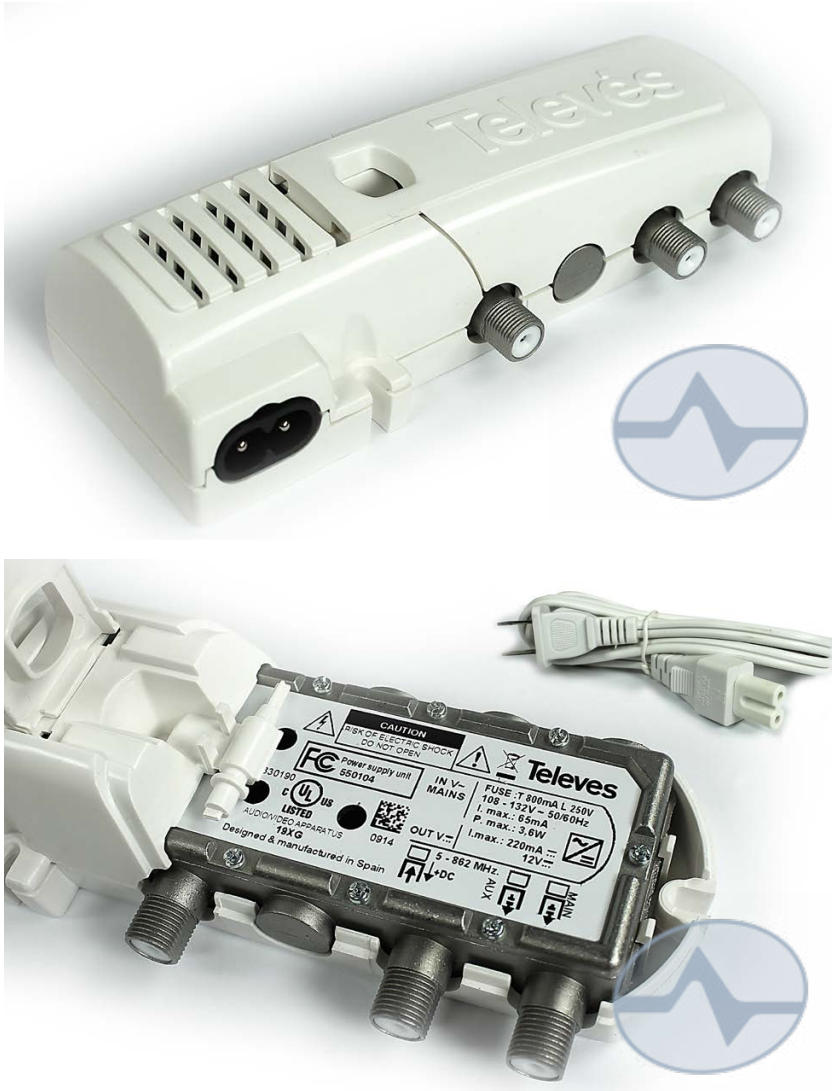
The antenna itself looks very similar to other UHF-only antennas on the market but has several unique features. Where other antennas use only one “director” or none at all (the protruding bars at the front) this antenna uses three unequal-length directors. This patented design sends more signal toward the receiving elements and helps filter out LTE signals which are an increasing problem with over-the-air TV reception.

Viewed from the side it's easy to see those long directors and the relatively steep angle of the reflectors (the angled top and bottom pieces. When these two parts are combined, you get the ability to pull in signals from a wide area and still focus as much signal as possible where it needs to be.

At the center you see the innovatively shaped receiving element. This wide bow-tie shape is the part of the antenna that actually pulls in the signal. The electronics are contained in the weather-resistant gold-orange shell.

You can see the exceptional quality of the joints and connectors. The mating assembly where the reflectors meet the main body of the antenna looks like solid steel and holds up very well.

The optional amplifier



Amplified antennas are all the rage, because they let you drive multiple TVs and help you with fringe reception issues. This antenna comes with an innovative amplification system that is much better than others on the market for several reasons.

Passive amplification

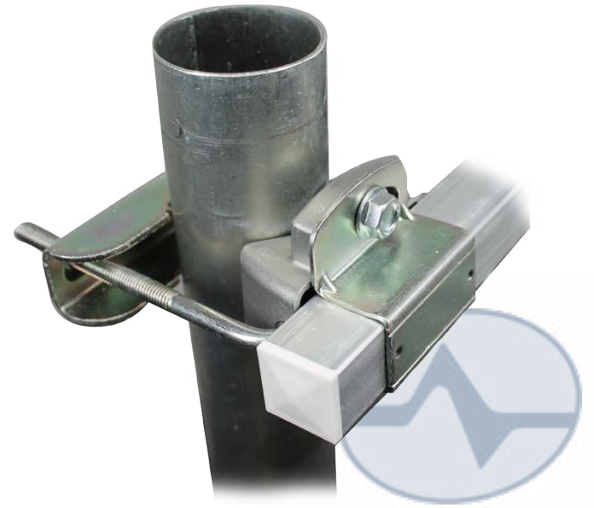
Most mast-mounted amplifiers and amplified antennas put the amplifier outside near the antenna. This is done so that amplification takes place before any losses due to the cable between the antenna and the home. When you use an amplifier like that, you need to use **RG6 cable with a solid copper core**. This is the only cable that will actually carry power up the line so the amplifier can actually work. However, you can't get that kind of cable at your local home store and you may not want to climb all around to install new cable.

That's why the DAT970 is passively amplified, and it's one of the few antennas on the market that is. Most amplified antennas won't work at all if they're not powered, but the DAT970 will. If you don't need an amplifier, don't use it.

The DAT970 includes this power injector that sends power up to the amplifier and also lets you run up to 2 TVs without adding an additional signal. It plugs into the wall inside and safely does its job. If it becomes unplugged, the antennas will still function and the power supply may be completely bypassed if you don't feel you have a need for amplification. If you are less than 30 miles from broadcast towers or if you see odd interference on many channels, you may not need an amplifier and may be better off without it. It's your decision.

Another innovative feature of this antenna is a built-in 1x2 splitter that allows you to run two televisions from the one power supply unit.

Installation



The DAT790 series of antennas mount to a mast using a hybrid adjustable clamp system that puts the antenna slightly off center on a mast so it can be mounted slightly lower. This reduces stress on the mast and makes the antenna less likely to rotate in high winds compared to antennas that mount to the top of the mast. The clamp can be adjusted to allow the antenna to tilt up and down about 5 degrees before being locked in, and in addition to a toothed bar as you generally see on this sort of antenna, there's also a notched, ribbed steel piece on the opposite side of the bar to help the antenna stay where you put it.

Who is Televes?

They're not a well-known company in the US... yet. Solid Signal chose to partner with Televes after an extensive worldwide search because Televes stands for the same things we stand for: quality, performance, and customer satisfaction. Televes is based in Spain and designs and manufacturers all their products in Europe. The manufacturing quality is far above other similar products.

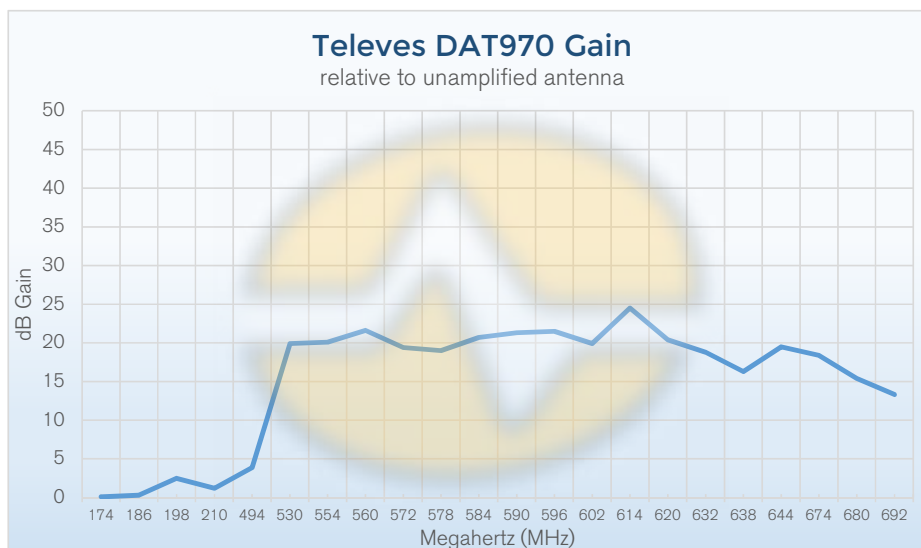
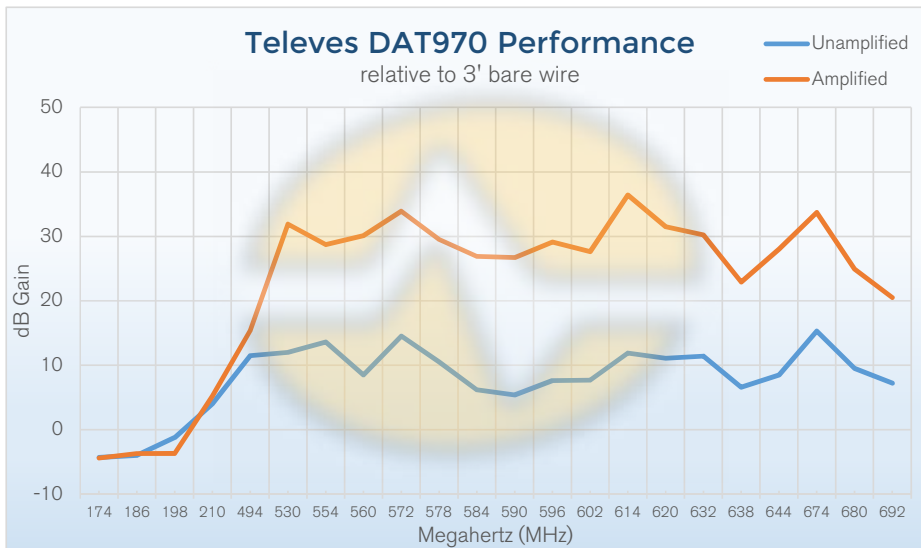
The company has been around since 1958 and is a worldwide leader in antennas, satellite products and test equipment. They're used by all the major satellite companies for their own test and measurement systems.

If you think Televes products look similar to Chinese-made products, there's a reason for that; they're the most popular antenna brand in Europe and therefore an easy target for reverse-engineering. The difference is obvious when you actually get your hands on an antenna, though. This is a solidly-built product designed to last for years.

Solid Signal is the exclusive direct retailer and distributor of Televes products in the US and we've worked hard to bring Televes antennas to our customers at a price that compares to much lower-quality antennas.



Testing and Performance



Performance on this antenna was more than satisfactory for an outdoor antenna and should be sufficient for most suburban installations. A truly long-range antenna would be better for much more distant stations. For this test, a 3' length of bare wire was arranged in a dipole shape and tested for reception. The DAT970s was placed in the same position and tested with amplification off and on. In both cases the power supply was in line, proving that the amplifier will perform with or without power.

All tests were conducted on the same day with the same weather conditions, at our laboratory approximately 55 miles from broadcast towers.

When you look at just the amplifier gain, you really see the quality of this product. Unlike other amplifiers, the amount of gain is very

consistent from top end to bottom, showing only a slight drop toward the very high end. This indicates the presence of a slope compensator, which adds more power to the high end to make up for the relatively harder job of amplifying higher frequency signals.

You also see very clearly in both charts that this antenna is actively rejecting VHF signals. Up to about 200MHz (which is the low end of UHF) performance is actually worse than a comparable amount of bare wire, meaning that the antenna is actually filtering out VHF. Even when amplified, the auto gain control and tuning of the amplifier means that there is practically no signal at all passing through VHF and up to the very low end of UHF.

LTE filtering



Televes antennas are the only brand to incorporate LTE filtering into their full antenna line. Every single antenna is designed to reject LTE signals from US carriers. This is incredibly important

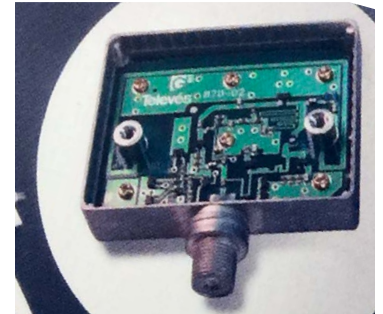
because as cell carriers build more towers, there's an ever-growing chance that your home or office is going to be very near one, and that the LTE signal will be a lot stronger than distant antenna signals.

LTE provides wireless internet to cell phones using frequencies that were once used for TV antennas. Even though those frequencies aren't used anymore, older antennas will still pick them up, and newer antennas can as well depending on their manufacture. LTE signals can even affect channels on "fractional" frequencies -- For example LTE transmissions at 792MHz can also affect broadcasts at 396 and 198MHz, which are half and one-quarter of the frequency used by LTE. By blocking LTE transmissions completely you have the best chance of picking up all the channels you want, interference-free.

BOSS Amplification

Every Televes amplified antenna uses BOSS amplification technology.

Televes' BOSS amplifiers actively prevent the



amount of gain for every frequency. This is a major upgrade in amplifier technology that only Televes has. Auto gain control allows every channel to be strongly amplified without worrying that other channels are going to be "overdriven" which would cause picture distortion or even damage to a TV tuner.

BOSS amplifiers are compact, low-noise amplifiers that actively reject signals that fall out of the bands the antenna should receive. Power use is minimal and the amplifier runs cool enough to be housed in a weather-resistant enclosure and no airflow is necessary.

Finally, all Televes amplified antennas use passive technology meaning that if the amplifier is not powered, fails, or just isn't plugged in the antenna will still work. Televes is one of very few manufacturers to include this technology.

Should you buy this antenna?

In tests, the DAT970 performed better than competitors and when compared to other UHF-only antennas, it demonstrated superior rejection of VHF signals and the highest amplification of any antenna we've seen while avoiding overdriving. UHF performance below channel 17 was diminished and if you need channels 14-17 you may wish to look at the UHF/VHF version of this antenna.

This is the UHF antenna you've been waiting for.

*Try the DAT970 from Televes,
available now at Solid Signal.*

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