

# SOLID SIGNAL'S HANDS ON REVIEW

## TELEVES DATBOSS LR UHF ANTENNA



Model 149783



# Long-range UHF just got better.



\$30 antennas are well and good, and Solid Signal sells a lot of them. They don't last forever and they're not always the best solution for really long-range reception. When you're ready to step up to a real, professional solution, consider the [Televes DATBOSS Mix UHF antenna](#). It combines updated electronics with a proven design to create the most powerful long range antenna that Televes has ever made. It may look like last year's antenna, but the electronics are all new and use new "T-Force" manufacturing technology to get a more powerful amplifier than ever before with the cleanest possible amplification. Ask yourself the following questions:

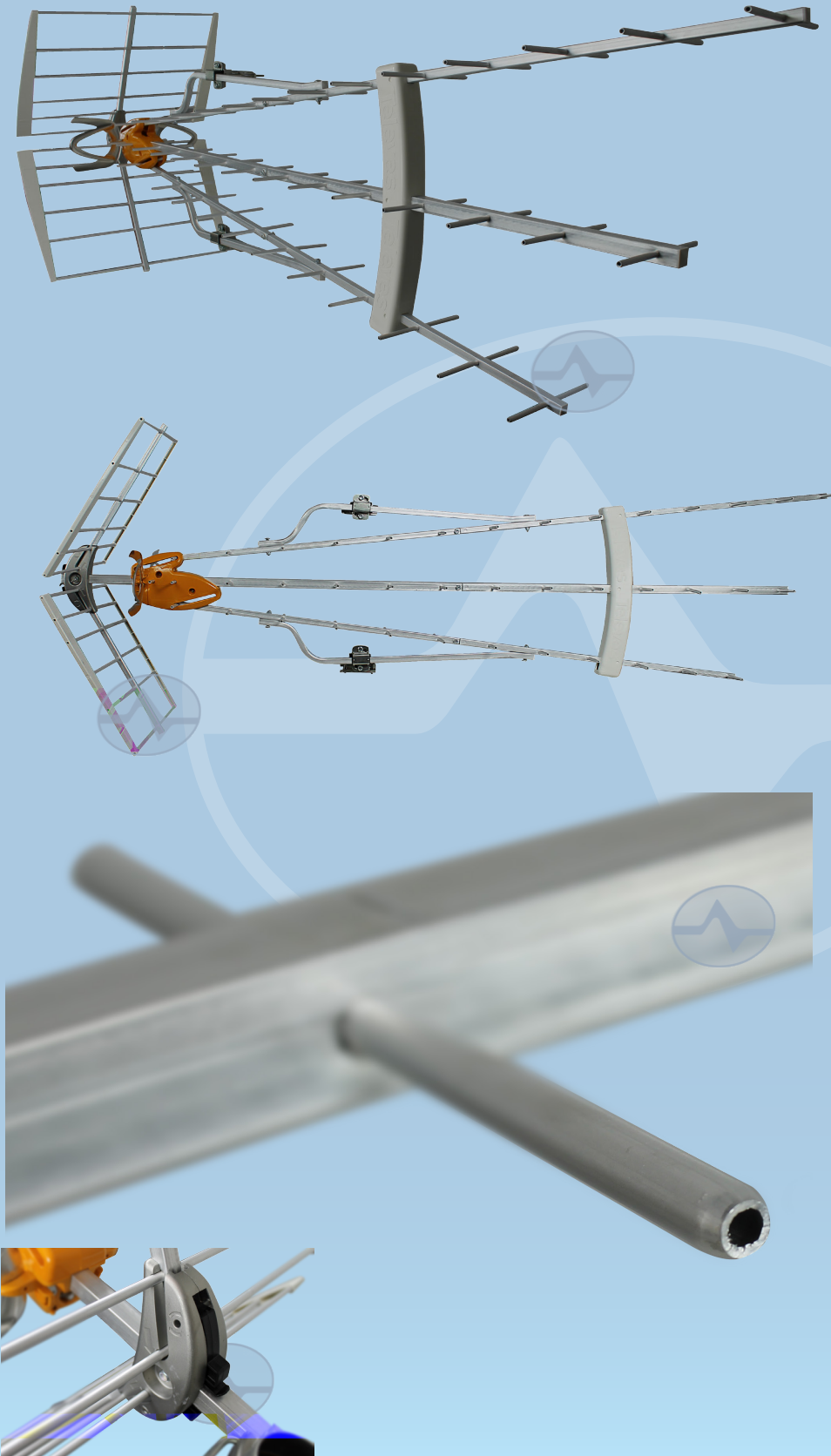
- **Do I need to receive channels from up to 80 miles away?**
- **Do I have a roof or attic space where I can mount an antenna?**
- **Can I install this antenna myself?**
- **Will my homeowners' association allow me to securely mount a very large antenna?**
- **Do I need an antenna that will stand up to the elements?**
- **Can a UHF-only antenna pull in the channels I need?**
- **How important is price?**

# The antenna itself

Make no mistake, this antenna is big. It's not the largest antenna sold by Solid Signal but it's well past the 39" limit allowed by some homeowners' associations. Fully assembled it will be over five feet long. It's also solidly built, so the most important thing when mounting is a nice strong, secure mast.

One characteristic of Televes' entire DATBOSS line is the triple set of "directors" in the front. These give the antenna its characteristic shape and help bring in more distant signals. The patented design used three sets of directors of unequal length to help focus ground-based signals and reject signals from cell towers.

The big difference between this antenna and the MIX LR version is that the MIX LR has a second set of posts behind the large reflectors which are designed to pick up UHF signals. All of Televes' yagi antennas are made from laminated aluminum and UV-resistant plastics. You should expect this antenna to hold up to years of use.



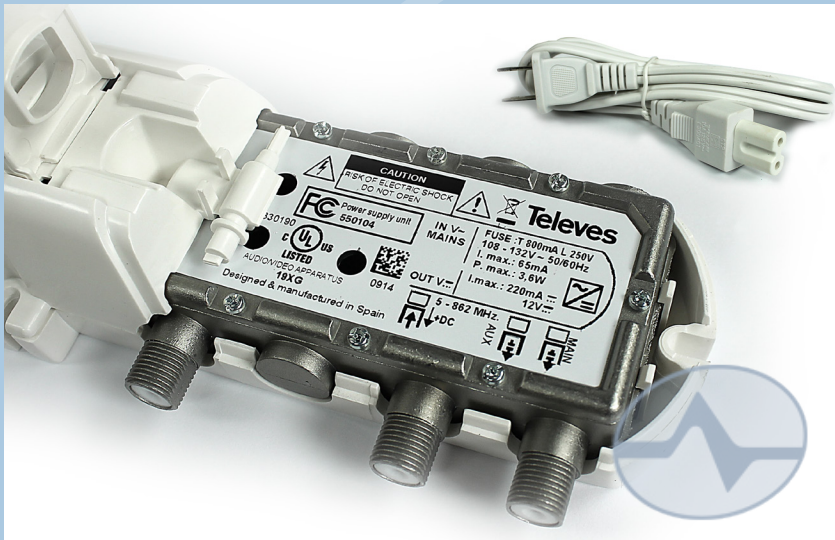
# The optional amplifier



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 DATBOSS Mix LR 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 DATBOSS Mix LR will. If you don't need an amplifier, don't use it.

The DATBOSS Mix LR 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. While this power injector looks like Televes' own distribution amplifier, it does not have any amplification within in. The amplifier assembly is located within the antenna itself.

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. If only one television is used, it is best to put a terminator on the unused port. Both ports have the same output level, however Televes' materials state that the rightmost port should be used if only one TV is attached.



# Installation



The DATBOSS 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.

The clamp is designed to make a slight indentation in the antenna to allow it to hold securely.

## 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 Santiago de Compostela, Spain and designs and manufactures 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. As they grew, they developed ways to manufacture as much as possible within their own facility. As a result, they have some of the most advanced fabrication methods in the world. They start with raw materials like aluminum ingots, plastic pellets and metal sheets, and they custom-fabricate every part. This includes the manufacture of their own circuit boards, as well as laser cutting, etching, CNC machining, and metal stamping.

Televes equipment is found worldwide in mission-critical control rooms and is carried by installation professionals.

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.

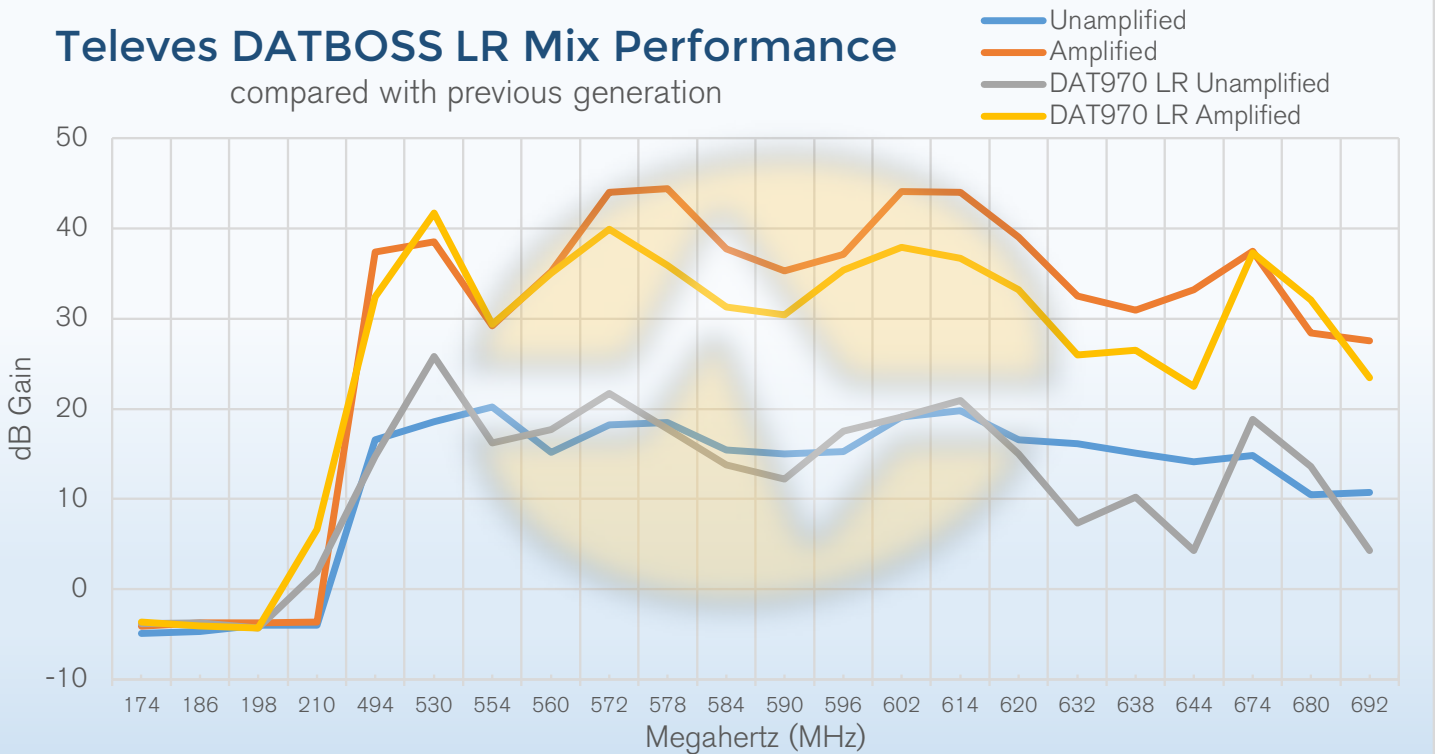
Solid Signal is the exclusive direct retailer and distributor of Televes products in the US and we've worked hard to bring Televes antennas to our customers at a price that compares to much lower-quality antennas. We offer full technical support for the Televes line in our Novi, Michigan facility, ensuring the best possible technical support.



# Testing and Performance

## Televes DATBOSS LR Mix Performance

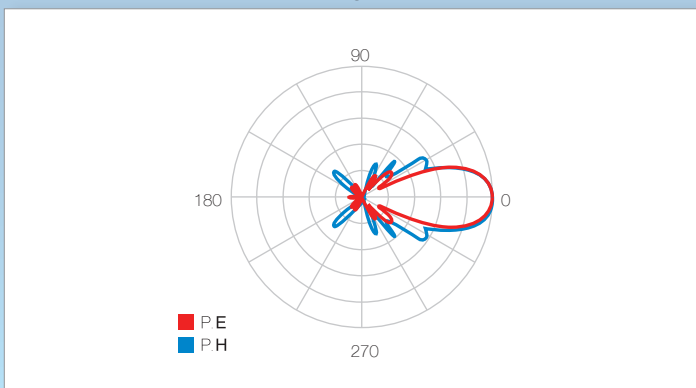
compared with previous generation



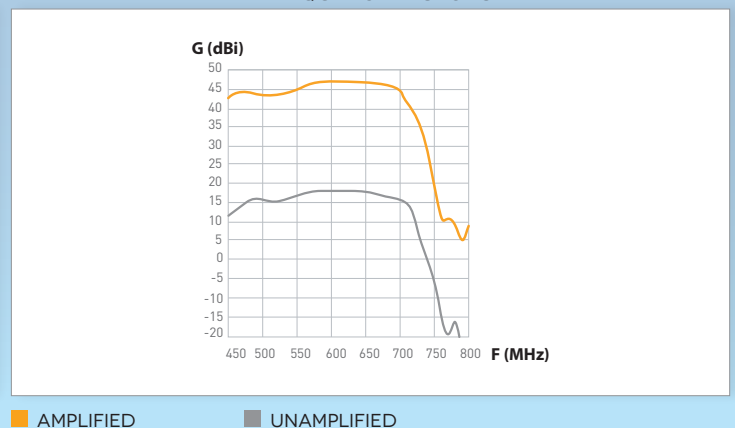
Compared to last year's model, the DATBOSS Mix LR has better performance, by up to 10dB in real world tests. Surprisingly, amplified performance on the VHF end was not as good but still quite solid. There is so much gain that the results may be simply showing auto gain control coming into play. In addition to factory provided gain diagrams (below) the DATBOSS Mix LR was measured in a real-world environment against the previous generation DAT970 Mix LR. All gain numbers in real world testing are relative to measurements taken of a bare-wire dipole one meter in length placed in the same location and at the same height as the antenna.

Most long range antennas rely on noisy amplifiers to achieve maximum gain. This antenna uses strong unamplified gain numbers and adds to them with clean amplification. This long range antenna definitely earns its slogan, "If DATBOSS can't receive it, nothing can."

**RADIATION PATTERN**



**FREQUENCY RESPONSE**



# LTE filtering



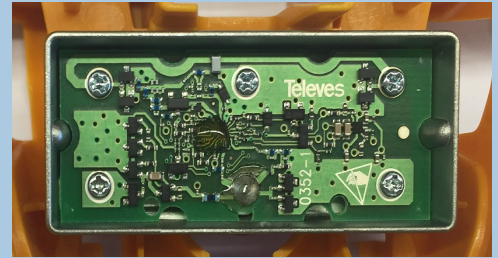
Televes antennas are the only brand to incorporate LTE filtering into their full antenna line. Every single antenna is designed to reject LTE signals from US carriers. This is incredibly important because as

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.

# T-Force Manufacturing

Televes' new and exclusive T-FORCE manufacturing process uses monolithic microwave integrated circuits (MMIC), for a new level of quality and reliability. All of Televes' amplifiers and circuit boards are made at their European facilities to exacting tolerances. This results in a level of quality that has not been seen before in residential antennas manufacturing.



All Televes amplified antennas use the BOSS-TECH amplifier which actively monitors frequencies in the antenna range and applies auto gain control to allow maximum amplification across the entire frequency range. Less expensive, Chinese-made antenna amplifiers simply provide excess amplification which can actually make a signal less useful, while creating noise that can never be removed from the line.

Televes' amplifiers achieve a class-leading 1.6dB noise figure across the entire UHF and VHF spectrum in independent testing. This means more of the amplified signal is actually usable, even if multiple splitters and long lines are used. Televes antennas can be powered using Televes' own mast-mounted amplified combiners, for maximum performance and maximum long-range reception.



## Should you buy this antenna?

If you live more than 65 miles from the towers, this antenna is going to be your best bet for receiving distant stations broadcasting on UHF. However, it is heavier and larger than the [Televes DATBOSS Mix](#) which will be a better bet for people with closer stations or VHF broadcasts. Its advanced electronics and clean manufacturing mean that it should be able to pick up even the most distant stations. As Televes themselves say, if the DATBOSS LR can't receive it, nothing can! This antenna is an exceptional value for cord-cutters looking for the best UHF antenna for long-term use. It beats other antennas with its superior construction and best-in-class performance. ***For top performance in an antenna that should last well over a decade, choose the [Televes DATBOSS LR](#) antenna today!***