# **SOLID SIGNAL'S HANDS-ON REVIEW**

# CHANNEL MASTER OMNI+ 50 OMNIDIRECTIONAL UHF/VHF ANTENNA



SOLIDSIGNAL

# The unexpected antenna



We usually think of antennas as being either omnidirectional, or highly directional. What if an antenna could be both? What if it gave great performance from every angle but especially good performance in VHF from one specific angle? This would be a very unexpected antenna.

When looking at TV antennas, we ask the same questions of each one:

- How far away can this antenna be from the broadcast towers?
- Will this antenna work with my HOA?
- Can I install this antenna myself?
- Do I need an antenna that will stand up to the elements?
- How important is price?

Channel Master is one of the most respected, longest-known names in the world of antennas. It's a brand that's been with us since your grandparents' day, and with antennas like the new  $\frac{\mathbf{0mni} + \mathbf{50}}{\mathbf{0mni}}$ , it looks like it's destined to be with us for years to come. This is a whole new category of antenna, one that combines the performance of a traditional yagi antenna with the omnidirectional aspect we need in so many markets. If you live, work, play or camp within 50 miles of broadcast towers, and especially if you're between cities, this might be the perfect antenna for you. Let's take a closer look.

## The antenna itself

You won't mistake the Omni + 50 for any other antenna on the market. The main section looks more like a steering wheel than an antenna, and there are two optional metal elements that extend from the sides. These give improved performance in VHF-High, which is getting more and more important as channels are "repacked" back into VHF.

The antenna features a unique mounting system that makes it easy to put on a wall, eave, or mast all using the same mount. Putting the body of the antenna far from its mount means that you'll have an easier time getting reception even from behind.

Overall the antenna feels solid with highquality plastic and solid metal parts throughout. This antenna really holds up the Channel Master tradition of durability. There are still Channel Master antennas on roofs that were installed over 50 years ago!

The purpose of an omnidirectional antenna is simple: give you good reception from all directions. Channel Master builds on this idea by putting the VHF dipoles in. A small omni antenna like this one would not normally have good performance with VHF, but adding the dipoles gives it the sensitivity it needs. You do need to point the dipoles so they get good reception, but with about 45 degrees of play and the ability to receive stations from both in front of and behind the antenna, it shouldn't be a problem.







# **Unique mounting**

The strength of this antenna comes from its unique mounting bracket. It's a sturdy piece of powder-coated metal that provides a firm base for the antenna and sets it away from the wall or mast. This makes the antenna more sensitive in the back.

The bracket attaches to the antenna with philips head screws. If you're mounting to a mast as shown here, you feed the U-bolt through the bracket for a clean, permanent installtion that also allows for occasional re-aiming.

If you're mounting to an eave, wall, or even to the side of an RV, you can use this same bracket because it has a perfectly flat back. In that case you get six holes to choose from. While the Omni + 50 does not come with mounting screws or bolts for a wall mount, you can use virtually any bolt or wood screw you happen to have.

If mounting to an eave, you may want to put a support block behind the eave moulding so that there's a little more strength to the mount. This antenna is light and doesn't put a lot of pressure on a wall or eave, but the long post does mean that any vertical movement from the antenna will be amplified and potentially create a weak spot on an eave or thin wall.







# **Surprisingly small**





The most surprising thing about this antenna is the size. The main antenna itself is under 10 inches in diameter, making it much smaller than other competing antennas. With the VHF dipoles installed, it measures in at 29 inches, which means it is covered by the FCC's OTARD rule. Your homeowners' association or landlord can't stop you from putting up this antenna, as long as you can put it in a private area like a patio and there is no damage to someone else's property. For more information about the OTARD Rule, **read this helpful article at The Solid Signal Blog.** 

If your landlord or HOA tells you can't put up an outdoor antenna, you have rights! Contact Solid Signal at 877.312.4547 for more information.

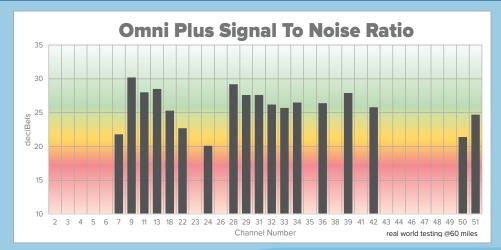
### **Who is Channel Master?**

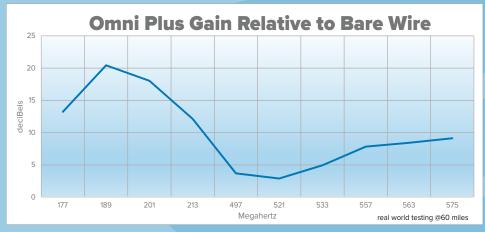
Channel Master is the industry leader in over-the-air broadcast entertainment products and solutions, providing the highest

quality and value for consumers since 1949. Headquartered in Chandler, Arizona (Phoenix), Channel Master offers a complete portfolio of over-the-air TV antennas, OTA DVR's, TV antenna mounting equipment, amplifiers, cables, connectors and more. Channel Master products are available at SolidSignal.com.



# **Testing and Performance**





All tests were conducted on the same day with the same weather conditions, at our laboratory approximately 60 miles from broadcast towers.

# Gain compared to bare wire

Channel Master rates this antenna at 4.5dB gain in lab testing. At Solid Signal we test antennas in a consistent real-world scenario that gives you a better idea what you'll expect. Antennas are tested against a length of bare wire bent in a dipole shape. This gives you an understanding of how well a given antenna might perform in your home, although every situation is different.

This antenna performed surprisingly well in VHF-low, and while there was somewhat less improvement in low-range UHF, it was still very similar to the rated gain from the manufacturer. Overall performance was excellent for such a compact antenna.

### Signal to Noise Ratio

Signal-to-noise ratio is the most important measurement for antenna signals. Looking at the chart, results in the yellow zone are usually good enough for one TV, while results in the green zone will let you use an antenna with multiple TVs without a distribution amplifier in most cases.

The Omni + 50 antenna locked into a surprising number of stations in the Los Angeles market, representing almost all the major stations in the market. Being an omni antenna it also picked up stations from nearby areas that directional antennas couldn't get.

# Should you buy this antenna?

In tests, the Omni + 50 antenna performed surprisingly well for a compact antenna. It's a perfect choice for people who live, work, travel, or play in areas between major cities. Channel Master's own ratings proved very conservative, and you'll be pleased by the performance you'll get if you try to receive stations up to 50 miles away.

<u>Try the Channel Master Omni + 50, available now at Solid Signal!</u>

