

Digital Antenna Troubleshooting

Bill Westhead has been involved in communications nearly all his life. Many of our customers have found themselves in a pickle since the introduction of digital TV transmission and he has helped sort out their problems. This article has been written by Bill to give simple advice on what to do if you want perfect pictures.

Since the introduction of Digital Free to Air television transmissions in Jan 2000, the number of frequencies broadcast in the Melbourne metropolitan areas has quadrupled. The amount of television transmissions in the ether (atmosphere) has challenged the manufacturers and installers of Television antennas to provide a professional, guaranteed and long lasting reception solution.

Whilst the environment is challenging, both those manufacturers with low noise equipment and professional installers have found their services in high demand.

The requirements for a professional and effective installation are:

- **A professional appraisal with the appropriate diagnostic equipment at the location with regard to television reception.**
- **An antenna mounted outside the roof line with a clear view to the respective transmitter (particularly for UHF).**
- **The appropriate antenna for the area.**
- **Low noise and well shielded cable matched with the appropriate F connectors, splitters and filters.**
- **Matched equipment.**
- **Balancing of signal strength inputs.**
- **A guarantee.**

The best equipment for antenna installation for Australian conditions is the products manufactured and supplied by Hills Industries. The range of domestic antenna, amplifiers and filters are without peer in this country.

With the use of premium equipment comes a higher price although most standard installations (one point, single storey, brick veneer dwelling) can be completed at a cost of around \$220 vs the \$190 industry mean.

It is surprising the number of people who will do it themselves on the basis of advice from a 16 year old at a hardware store. Fully 20% of my work is repairing DIY!



How often do you hear, "I'll stick on a Booster!" In most cases the correct selection of equipment with avoids the use of a "booster" or Mast Head Amplifier. You can only amplify signals that are low noise and clear. Remember the adage, "Garbage in – Garbage out."

When selecting your antenna installation professional, remember to ask about his training and background. I don't mow lawns or do electricity! Good antenna installers have been properly taught and trained as professional domestic television antenna installers. They don't need to advertise as enough work comes from stores like Audio Trends and referrals.

Set Top Boxes

These have been a great invention and usually solve most reception issues for those dwelling within the normal metropolitan areas. I say normal, because hilly areas like Upwey, Belgrave, Mount Evelyn and even Healesville have a different set of problems.

Recently we had an interesting problem with a customer living in a difficult reception area who experienced a power failure so short that he was unaware of it happening. Next time he switched his TV on, the picture quality was lousy. He had a Set Top Box, but not a digital antenna. So, he called a well known antenna company who promptly installed a new antenna and when that didn't work well, they then installed a mast-head amplifier. Still, no good, so they blamed the STB.

The problem was not the STB or the original antenna, but the power failure! The STB returned to its default setting of Mount Dandenong rather than the translator that had been originally encoded upon delivery and installation. The lesson is that STB decoders must be set to the applicable translator and the other channels edited out. The decoders default setting is Mount Dandenong and unless they are edited out, then the decoder will seek these first.

The outcome here was good and once the customer was helped to 'retune' his STB he stated that "the picture was so clear it could cut you!" However, even after editing the customer must be educated to know the correct channels as they can vary in each location.

Unfortunately should the decoder return to the default setting via a power failure or a reboot (a fairly regular occurrence with many cheaper units) the editing process must be redone.

With regard to the Mast Head Amplifier issues - all recently made videos, STBs, Pay TV decoders and satellite decoders are affected by the amplifiers when using RF inputs. Care must be taken by antenna installers to have the correct inputs i.e., the Australian standard of 65dbuv \pm 10% at the point.

Manufacturers are aware of these issues but it is easier to blame the antenna installers rather than fit modulators that take the appropriate signals! So, make sure your antenna installer does this for you.

In my opinion, the best low noise amplifier is the current Hills Low Noise Digital amplifier. The next best is again in my opinion, the Kingray amplifier.



Conclusion

Often problems can be attributed to either price or simply lack of experience. With regard to price, never choose the lowest price and always ask why a price is higher than another. Good materials cost more! Your guarantee before you contract any work should be one that guarantees, not OK pictures but rather perfect pictures and in multiple rooms if required.

E & OE

AudioTrends Showroom

10 Argent Place, Ringwood, VIC 3134

Phone 9874 8233

Hours: Mon - Thurs 10am to 5.30pm
Fri 10am to 7pm, Sat 10am to 4pm

