Welcome to AntennaSelect™ Volume 45 – August 2019

Welcome to Volume 45 of our newsletter, AntennaSelect™. Every two months we will be giving you an "under the radome" look at antenna and RF Technology. If there are subjects you would like to see covered, please let us know what you would like to see by emailing us at: info@micronetixx.com

In this issue:

ATSC 3.0 ? A real Specification for Antennas?

The answer is **NO**. There are no Specifications in any of the ATSC 3.0 Documentation Packages concerning antenna performance. Not one word. Here is our take (the editor – yep myself - has 45 years in television broadcasting). ATSC 3.0, plus many more advanced cousins now in the lab promise to greatly change the way we think about over-the-air transmission or "broadcasting".

So let's look backwards and forward at the same time at how we move (insert word or words you would like to use): internet like :data, broadcast content, IP .multicast, targeted geo zone SFN data. etc. There are no wrong answers. Even color with SAP and PRO was neat 25 years ago.

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OK, if there are no Specifications for 3.0, what attributes would help to increase error-free signal output? Higher density modulation schemes **use** multiple numbers of carriers in their passband, with seemingly higher carrier rates introduced everyday. By minimizing the amplitude and group delay differences across the channel, error correction schemes have a better chance of working. Hence, a higher error-free throughput rate. In the end that is the goal of many of the communication systems coming to market.

Remember, in addition to the transmitting antenna introducing some non-linearities, (well designed ones contribute very little), transmission system components such as bandpass and mask filters can introduce both time and amplitude delay to a signal.

So for a quick low down, what works well? First, for a higher gain slot-style antenna, (with a gain of 10 or more), a center-feed approach is best. (We will revisit this in a future article.) Secondly, an antenna with low differential group delay over its channel or channels is important. Typically, our UHF slot antennas measure 7 nS or less over a single channel.

Then if you have elected to upgrade to either elliptical or circular polarization, all of our E/P and C/P antenna designs deliver a true in phase quadature signal.

FML/LPFM Antennas Discontinued August 1st.

MICRONETIXX COMMUNICATIONS

The LPFM boom has been over for some time. We are now into Phase 6 of the TV repack. So we have made the decision to stop manufacture of or FML and LPFM antennas. These resources are now re-directed to DTV and larger FM Broadcast Antennas.

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While we wish good bye to theses antennas, all of the technical and applications information will remain on the website. (There is “a ton” of good technical information to read though. We continue to offer the higher power FMP Antenna Family ~ a very popular repack antenna.

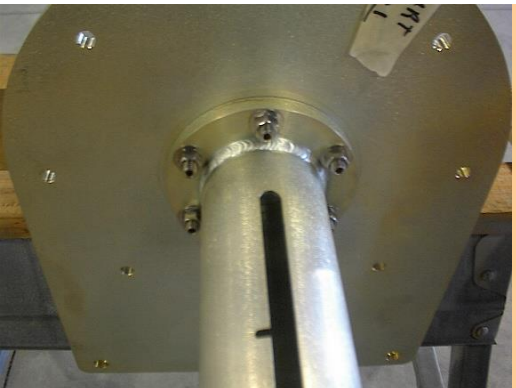
Updated lead time for antennas

Wow, phase 6 already. What happened ? We are busy and just this Friday extended lead times by about a week for side mount antennas, and three weeks for top mounted models.. For side mounted models, there are over 500 standard models in our engineering database, meaning we may have most or all front end work done on your new antenna.

For top-mount and top-mounted stacked antennas, the average delivery time increased by about 3 weeks.

The future? Our help wanted sign is always out for quality oriented new staff members.

Be on the lookout for the next volume of AntennaSelectTM coming out in October



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