



The

# Broadcasters' Desktop Resource

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... edited by Barry Mishkind – the Eclectic Engineer

## Low Power Low Down Counting the Cost from CP to Air



by Stanley Adams

*[January 2014] The FCC has indicated the LPFM Construction Permits (CPs) will start appearing sometime this month. For permittees, the next step is selecting and buying the transmission gear. Stan Adams sought some information and shares it here.*

As many of you know the time for learning if you made the cut for a Construction Permit will soon be upon us.

Most experienced broadcasters will tell you it is never too soon to plan what you will need, and investigate the options as far as equipment, vendor, or engineering services. As part of our Low Power FM Buyer's Guide coverage of the coming FCC license grants, we thought we would check out some of the "typical" equipment packages that are currently available for the consideration of applicants.

### GET READY



We spoke with Bob Cauthen over at [SCMS](http://SCMS), a company that has been providing equipment, services, and engineering knowledge to the broadcast industry for 38 years.

As such, they have been involved in thousands of station construction projects – they even have owned FM facilities themselves. In the process, SCMS has supplied more translators and LPFM stations than any other company in the U.S.

### A CAREFUL BUDGET

"On Time and On Budget" has to be the mantra for all stations but nowhere more so than with LPFM'ers.

Initial money may well be very tight and there must be consideration of the need for continual funding for maintenance down through the years to come.

While there may some applicants who will not have to be overly concerned of initial startup costs, most will be looking for value-added solutions to their needs.

### GET SET

Bob told us SCMS has six main LPFM packages, spanning a large range of products and price. As each package is customizable, these may be modified, based on the particular frequency, tower, and FCC pattern.

For example, here is one transmitter package that Bob and SCMS recommend with a price tag of under \$4500:

- The BW Broadcast TX-300 Solid State V2 FM transmitter.
- RF Technologies 300FM folded-dipole, unity gain antenna (especially important as compared to a quarter-wave antenna).
- Cablewave RFS coaxial cable. A package is available with everything you will need, including:
  - 120 feet: Cablewave RFS LCF12-50J-P7 1/2" Cellflex® Foam Dielectric Coaxial Cable.
  - 2 each: NM-LCF12-D01 OMNI FIT Premium N Male, 1/2" Coaxial Cable.
  - 2 each: GKFORM60-12 Ground Kit
  - HOIST1-12L Hoisting Grip - Lace Up, 1/2" Diameter Cable.
  - Large Diameter Strapping.

Other packages might offer variations to the transmitter and antenna package above. Still others would add studio equipment, from microphones to consoles to audio processing gear – even including live “call-in” on-air equipment to serve those who want to work with a talk-based audience.

In other words, there is plenty of freedom to choose which options will work best for your station. And now is the best time to plan and choose the best ones for your situation.

### BE SUCCESSFUL

Finally, I asked Bob for some suggestions to help new LPFM CP recipients achieve successful operations

He explained to me that there are really two very important lessons he has learned in his experience through the years:

1. Make sure that someone with the station operation is able to capture the mood

and message of the station with a very strong and interactive web presence.

A good, community-based website should be well-designed and eye catching in order to draw attention to your station, and make it stand out from the rest. Furthermore, provide a wealth of related content and features, such as topics of education, worship, sports and more. In other words, serve your community well.

2. As you no-doubt know, LPFM radio has a very limited coverage area, so you should definitely maximize your reach by streaming the programming over the Internet as well.

Streaming can extend your coverage world-wide and will allow you to have listeners anywhere in the world via the Internet or with apps for Android and iPhones.

The hardware costs for streaming are relatively modest. And SCMS can provide streaming capability and automation software practically without cost. But!



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Do note that if you are going to have an LPFM station, you will need to be aware of the royalties for terrestrial over the air broadcasting and streaming over the Internet. The cost can be very high with fines if not done properly.

Bottom line: plan ahead carefully. You will save money, build a station that serves the community well, and you might even have some fun in the process!

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*For more information, you can contact SCMS at 800-438-6040*

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