

## PPM Encoding Best Practices

### An Update for Station Engineers on Encoding Best Practices

- Install the Nielsen Audio PPM Encoder downstream of any switching or delay equipment in a location that offers consistent audio levels (+4dBu for Analog, -20dBFS for Digital).
- If configured for external time sync, connect the Nielsen Audio PPM Encoder to an accurate external time source (Master Clock or Time Server) if one is available in your facility.
  - If using Network Time Protocol (NTP) ensure time on the server is set to UTC, not local time.
- If you are using the Nielsen Software Encoder (SDK code and check digits) in processor, streamer, hardware or software from a Nielsen certified vendor, be sure UTC is set in accordance to your manufacturer's instructions.
- Connect the Nielsen Audio PPM Encoders and In-Station PPM Encoding Monitor(s) to a central alarming system if one is available at your facility.
  - If your facility does not have a central alarming system consider setting up email alerts for your multi-channel encoding monitor (MCEM).
  - Instructions for setting up MCEM alerts can be found on the Nielsen Audio Engineering portal.
- All encoders at your facility should be racked and powered with audio input.
  - No cold spares.
- Ensure audio you send or receive to/from other stations is un-encoded.
  - Re-encoding a piece of audio that has already been encoded may affect station crediting.
- Periodically switch between encoding on your Primary Encoder and encoding on your Backup Encoder.
  - A good guideline is to run on your back-up for 1 week every month.
- Connect your Nielsen In-Station PPM Encoding Monitor to an over-the-air feed of your broadcast to ensure that the aired broadcast was in fact properly encoded.
  - All stations that are encoded should be monitored, including HD1 simulcasts.
- Encode each of your stations transmission paths that can go to air, even paths that would only be used in an emergency.
- Cool the encoder with an external fan if the ambient temperature in the room regularly nears 85°F.
- Periodically check the tuner that is connected to the MCEM to ensure it is working properly.
- Ensure that your station's MCEM is updated with the current firmware.
  - The latest firmware version can be found on the Nielsen Audio Engineering portal.

**In the event that you need assistance in diagnosing any encoding alarm received from your Nielsen Audio PPM Encoder or In-Station PPM Encoding Monitor contact your Audio Client Engineer at 1-866-767-7212, or email [encoding@nielsen.com](mailto:encoding@nielsen.com)**