The Latest

Beacon FM-CW

Posted by AG6QV Frank Tags:

In the previous post I described how to make a HAM Radio beakon that could work with both CW and FM modulation. As I was testing the results of that I noticed an issue with the FM modulation as it would also modulate the carrier. That was not the intention, but it did function as an FM beacon. In this updated design I have utilized two Selector Blocks to switch the morse code signal either directly to the HackRF One or to go through the FM modulation stages to provide a constant tone.



I also updated the GUI to have a slider to set the CW speed between 5 and 20 words per minute with a default of 12 and added an input box to change the message used to generate the CW code. The screenshot below was created from running the Python code after manually adding the additional frequencies.



The two Python files are available for download: <u>Beacon.py</u> and <u>Beacon_epy_block_0.py</u> as well as the flow graph: <u>Beacon.grc</u>.

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