Options
Title: Signal C...rum Display
Author: muaddib
Output Language: Python
Generate Options: No GUI
Run Options: Run to Completion

Note
Note:
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| COMMAND LINE PARAMETERS
| WHEN WE USE PARAMETER BLOCKS
| THE GENERATED PYTHON WILL
| NOW HAVE A --help/-h menu

Parameter
ID: samp_rate
Label: sample rate
Type: Float
Value: 2.88M
Short ID: s

Parameter
ID: fft_size
Label: fft size
Type: Int
Value: 8.192k
Short ID: n

Parameter
ID: frame_rate
Label: frame rate
Type: Int
Value: 30
Short ID: r

Parameter
ID: frequency
Label: frequency
Type: Float
Value: 100M
Short ID: f

Parameter
ID: gain
Label: gain
Type: Float
Value: 40
Short ID: g

XMLRPC Server
Address: localhost
Port: 8.001k

Note
Note:

Note
Note:

Python Snippet
Section of Flowgraph: Main - After Init
Priority: 1
Code Snippet: self...p_vars")

Import
Import: json

Import
Import: argparse

Python Snippet
Section of Flowgraph: Main - After Start
Priority: 1
Code Snippet: self...server")

Import
Import: np

Import
Import: WSGIServer

Python Snippet
Section of Flowgraph: Main - After Init
Priority: 1
Code Snippet: @sel...oot='.')

Import
Import: WebSocketError

Import
Import: WebSocketHandler

Note
Note:

Import
Import: request...static_file

Import
Import: pprint
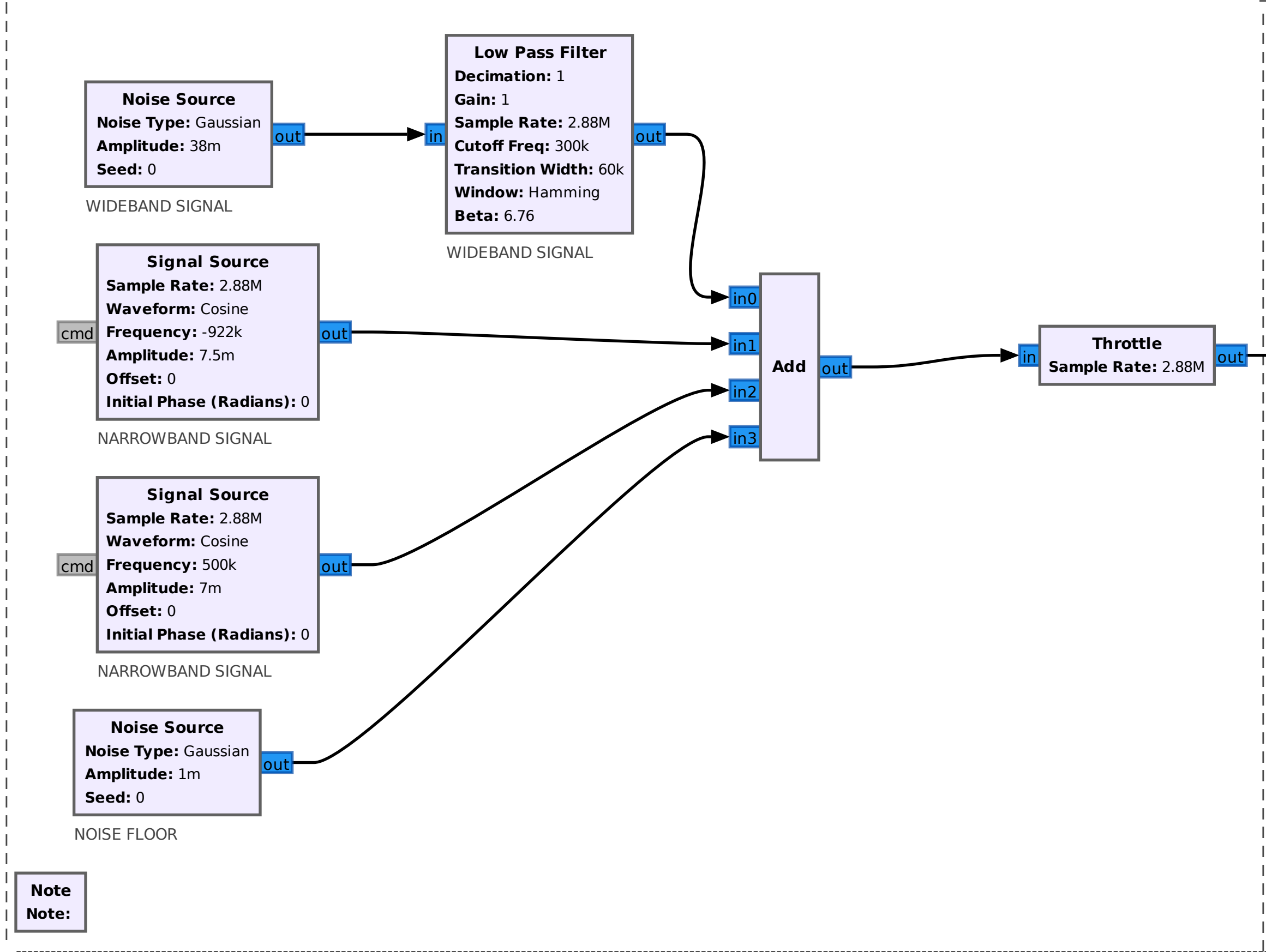
TRIED TO IMPORT THE BOTTLE SERVER PORTION
AND BRING IN THE NON-GNURADIO CODE USING
PYTHON SNIPPETS AS A PROOF OF CONCEPT
NOT INTENDED FOR THE FINAL CODE
(ALSO DOESN'T WORK I DONT THINK)

Note
Note:

Noise Source
Noise Type: Gaussian
Amplitude: 38m
Seed: 0

WIDEBAND SIGNAL

Low Pass Filter
Decimation: 1
Gain: 1
Sample Rate: 2.88M
Cutoff Freq: 300k
Transition Width: 60k
Window: Hamming
Beta: 6.76

WIDEBAND SIGNAL

Signal Source
Sample Rate: 2.88M
Waveform: Cosine
Frequency: -922k
Amplitude: 7.5m
Offset: 0
Initial Phase (Radians): 0

NARROWBAND SIGNAL

Signal Source
Sample Rate: 2.88M
Waveform: Cosine
Frequency: 500k
Amplitude: 7m
Offset: 0
Initial Phase (Radians): 0

NARROWBAND SIGNAL

Noise Source
Noise Type: Gaussian
Amplitude: 1m
Seed: 0

NOISE FLOOR

Add

Throttle
Sample Rate: 2.88M

Note
Note:

| DSP SECTION
| SAME BLOCKS AS 'server.py'
| FROM WATERFALL PROJECT

Note
Note:

Log Power FFT
Sample Rate: 2.88M
FFT Size: 8.192k
Reference Scale: 1
Frame Rate: 30
Average: Off
Average Alpha: 1
FFT Shift: On

ZMQ PUB Sink
Vector Length: 8.192k
Address: tcp://127.0.0.1:5001
Timeout (msec): 100
Pass Tags: No
Filter Key:

Note
Note:

Note
Note:

RADIO SOURCE (DISABLE THE
FAKE SIGNAL IF YOU'RE GONNA USE THIS)

Soapy RTLSDR Source
Sample Rate: 2.88M
Center Freq (Hz): 100M

Note
Note:

Note
Note:

FAKE MULTI CARRIER SIGNAL
NOISE FLOOR ACCROSS SPECTRUM
2 NARROWBAND CARRIERS
AND 1 WIDEBAND CARRIER
(NO RADIO REQUIRED)