

A Software Keyer for GNU Radio

Build a software keyer from keyboard for GNU Radio on Linux

1. GNU Radio

[Intro to GNU Radio Companion](#)

```
"""
Keyboard CW keyer block
Outputs 1.0 when SPACE is pressed, else 0.0
"""

import numpy as np
from gnuradio import gr
from pynput import keyboard

class blk(gr.sync_block):
    """
    Keyboard CW Keyer
    """

    def __init__(self):
        gr.sync_block.__init__(
            self,
            name="Keyboard CW Keyer",
            in_sig=None,
            out_sig=[np.float32],
        )
        self.state = 0.0
        listener = keyboard.Listener(
            on_press=self.on_press, on_release=self.on_release
        )
        listener.daemon = True
        listener.start()

    def on_press(self, key):
        if key == keyboard.Key.space:
            self.state = 1.0

    def on_release(self, key):
        if key == keyboard.Key.space:
            self.state = 0.0
```

```
def work(self, input_items, output_items):  
    out = output_items[0]  
    out[:] = self.state  
    return len(out)
```