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I have DT770m headphones that need EQ to be decent. I used to use easyeffects but it required a lot of extra load. Pipewire already has a native equalizer (or can use LV2/LADSPA plugins). So, it made sense to just do the EQ in pipewire.

Normally, you can add this directly to your output device. In my case I'm using a USB sound card (courtesy of David Yeh), which while it has ALSA plugins, doesn't do volume control the normal way, and has both 3.5mm and toslink out.

So, I use the 4 channel mode, with fronts to 3.5mm and rears to optical on the sound card. Meaning, I made two nodes like this to separate my headphone/speaker and reroute them to the front/rear channels.

This also lets me independently control volume on the 3.5mm and toslink (albeit digitally, which is fine at 16 bit for most cases).

```
context.modules = [
{
  name = libpipewire-module-filter-chain
  args = {
    node.name = "EMU_Headphones"
    node.description = "E-Mu 0404 Headphones"
    media.name = "E-Mu 0404 Headphones"
    filter.graph = {
      nodes = [
        {
          type = builtin
          name = eq
          label = param_eq
          config = {
            filters = [
              { type = bq_highshelf, freq = 0, gain = -6.6, q = 1.0 }
              { type = bq_lowshelf, freq = 100, gain = 10.5, q = 1.0 }
              { type = bq_peaking, freq = 100, gain = -7.0, q = 0.4 }
              { type = bq_peaking, freq = 3500, gain = 4.5, q = 0.7 }
              { type = bq_peaking, freq = 2000, gain = -3.5, q = 1.4 }
              { type = bq_peaking, freq = 2800, gain = 1.3, q = 3.0 }
            ]
          }
        }
      ]
    }
  }
  audio.channels = 2
  audio.position = [ FL FR ]
  capture.props = {
    node.linger = true
    media.class = Audio/Sink
    audio.channels = 2
    audio.position = [ FL FR ]
  }
}
```

```
    }
    playback.props = {
        node.target = "alsa_output.usb-E-MU_Systems__Inc._E-MU_0404__USB_E-
MU-70-3F04-07D60A1C-075A2-STN_2-00.analog-surround-40"
        node.linger = true
        stream.dont-remix = true
        audio.channels = 2
        audio.position = [ FL FR ]
        stream.channel-map = [ FL FR ]
    }
}
]
]
```

From:

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Permanent link:

https://wiki.tonytascioglu.com/scripts/media/apply_eq_directly_in_pipewire?rev=1769456421

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