> In analog, there's no amount of steps. It's infinite.
> — *deadmau5*

CHAPTER RECAP

The digital vs. analog debate can sometimes sound more like hot air than substance, but by running a scientific A-to-B comparison of what the two sound like, you can hear some basic differences. Analog filters tend to be warmer than their digital counterparts in subtle but noticeable ways. More markedly, analog filters have an infinite range of steps between their upper and lower limits, while even the best digital filters, which make use of oversampling and floating point integers, will always sound "steppy" as they make minute adjustments.

TAKE IT FURTHER

- You can find YouTube demos of lots of analog synths, including:
  - the Prophet 10
  - the OSCar
- You can also find YouTube demos on some other famous keyboards like:
  - the MOOG Voyager
  - the Yamaha CS-80
- Listen to the wide range of sonic possibilities. Getting to know the characteristics of some of the world's greatest synths will help prepare your ears to get better sounds out of whatever gear you're using–digital and analog alike.

SUBCHAPTERS

NOTES

ASSIGNMENT

- Run your own Digital vs. Analog test. If you've got access to both kind of synthesizers, set up a simple A/B comparison like Joel did and try to hear the difference for yourself. Play a simple square wave at a given pitch, then run it through a low pass filter. Can you hear any differences in the oscillators on their own? Do you hear the steps in the digital filter? If you can't get your hands on the synths you need, find a music store near you and mess around with their equipment.

NOTES