

# Apogee Application Notes

**Apogee**  
ELECTRONICS  
www.apogeedigital.com

Product: AD-8000/DAC-8 Analog Output Card  
Topic: 16/20/24 Bit Indicators  
Document #: 5

## Question/Issue:

When I feed the AD-8000 a 20- or 24-bit signal from some of my gear, the 16/20/24 resolution indicators do not read the correct word length (number of bits). Why is this?

## Answer:

The 16-/20-/24-bit indicator section **displays the setting of the word-length status bit of the incoming digital signal** selected in SOURCE SELECT. The AD-8000 **does not “count” the number of bits** in an incoming digital signal. As of this writing, many audio manufacturers have not adopted the use of this status bit. Therefore, even though you may be playing back a 24 bit signal from your DAW, for example, the AD-8000 may still indicate “16” bit resolution. Don't worry, if you recorded the material at 24 bit, it's coming back at 24-bit resolution into the AD-8000 (unless you've done something tricky to it in the interim or have applied UV22).

As of this writing, it is suggested that the truncation logic DIP switch (AUX Control DIP SW #9) be set to "ON" (so that the truncation logic is *disabled*) when feeding the AD-8000 a 20 or 24 bit digital signal. In this case, if an incoming 24 bit signal incorrectly identifies itself as a 16 bit signal (or doesn't identify itself at all), the AD-8000 will not truncate the least significant bits. Again, please note that to *disable* truncation logic, DIP SW #9 is set to "ON" which is the UP position. See page 19 of the manual for more information.

