

How fast can I output an analog value?

Check the specification for the card you are using. If this is a paced analog output, the specification will be in the manual for the card you are using (i.e. for a PCI-DAS1602/16 the specification for the D/A Throughput will be 100KHz, 2 Channels simultaneous). If there is not a Rate or Throughput specification, then the D/A's on the card you are using have no specific rate. These types are updateable via software and the rate you get would depend on the PC speed, the overhead of your operating system and the length of your program. These types of D/A's are normally used in a static or feedback configuration where the output level is changed based on an external stimulus. Update rates can be determined through experimentation in your code, but will change from PC to PC.

Measurement Computing Data Acquisition Knowledgebase
<https://kb.mccdaq.com/KnowledgebaseArticle50088.aspx>